THE ACQUISITION OF THE SYNTAX OF NEGATION AND ADJECTIVES BY ADULT AUSTRALIAN LEARNERS OF INDONESIAN

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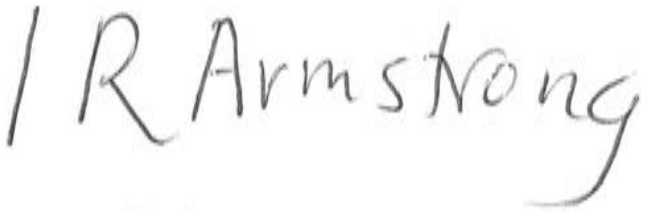
Statement

Except where it is otherwise acknowledged in the text, this thesis represents the original research of the author.



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I dedicate this thesis to my late mother, Ada, who always believed that women could achieve the same level of education as men.

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ABSTRACT

This study examines the acquisition of Indonesian syntax by adult second language learners in a formal setting. The study uses a descriptive approach, focusing on the early development of negation and adjectival syntax in spontaneous oral production.

The informants for the study were three native speakers of Australian English enrolled in a first year university Indonesian course. The study used a longitudinal design and 23 speech samples were collected from each student over a period of 68 weeks. Data elicitation occurred primarily through semi-structured interviews. These were supplemented by communicative tasks during the latter part of the data collection period.

The productions were transcribed, analysed and frequencies recorded. These formed the basis for a qualitative and quantitative analysis of individual students' development up to and following acquisition of the target language structures. The criteria used to determine acquisition were based on productive use, frequency of production and lexical variation.

The results show that negation and adjectival syntax were acquired in sequences which were the same for all learners. The sequence for negation was related to predicate categories, while the acquisition of adjectival syntax was related to syntactic function and complexity. The learners' development in relation to each of the structures analysed was also similar. A comparison of the acquisition sequences with the teaching input, however, showed major discrepancies. Some recommendations for teaching are suggested in the light of the study's findings.

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TRANSCRIPTION CONVENTIONS

(..)	pause, each dot represents a pause of approximately one second
...	ellipsis denotes omitted material
u h m	denotes uncertainty of the speaker (filler)
er	denotes uncertainty of the speaker (filler)
((laugh))	the speaker laughs (comments of transcriber)

Numbering and Presentation Conventions for Sample Sentences

(1)	denotes the sequence number for each sentence within the chapter: sentences are numbered from 1 - n in each chapter.
(Mw1s2)	for example, denotes Matt's utterance in week 1, sentence number 2. This refers to the location of the utterance in the original transcript.
Small font	sentences in small font are used to show utterances from the interviewer or the conversation partner, or the textbook model input.

SYMBOLS AND ABBREVIATIONS

Symbols

⇒	indicates a sequence of acquisition e.g: X ⇒ Y means X is acquired before Y
∅	denotes an empty position in a phrase
*	denotes ungrammatical sentences or utterances

Abbreviations

1Ppl	first person plural
1Psg	first person singular
2Ppl	second person plural
2Psg	second person singular
3Ppl	third person plural
3Psg	third person singular
1Ppl-EXCL	first person plural exclusive (*kami* 'we': excludes the person who is addressed)
1Ppl-INCL	first person plural inclusive (*kita* 'we': includes the person who is addressed)
A	adjective
Adv	phrasal adverb
AP_{PRED}	adjective phrase predicate
Attr Adj	attributive adjective
aux	auxiliary
CL	clause
CLASS	classifier
DET	determiner
FOR	formal language (used for free translation)
I	inflection
IL	interlanguage
lx	lexical item

IP	inflectional phrase
Iw	interviewer
J	Jane
K	Kate
L1	first language
L2	second language
LIT	literally (used for literal translation)
M	Matt
neg	negation
NP_{PRED}	noun phrase predicate
POSS	possessive
Pred Adj	predicative adjective
PP	prepositional phrase
Q	question (word)
QTF	quantifier
REL	relativiser
REL CL	relative clause
rp	repertoire
S	sentence
SLA	second language acquisition
TL	target language
VP_{PRED}	verbal phrase
W	week
X	a (grammatical) unit
XP	an 'X' phrase

INTRODUCTION

i. Background

The Indonesian language, or *Bahasa Indonesia*, has been offered at secondary or tertiary levels for decades either as a core or an elective subject in Australia. Despite this, Indonesian second language[1] acquisition (SLA) has received little attention. This study is an investigation of the stages of development of Australian students learning Indonesian as a second language in a formal environment.

Having taught Indonesian at both secondary and tertiary levels for a number of years, I have noticed some consistent errors produced by students: no matter how many times they are corrected, the same grammatical errors appear. I am very interested in investigating these errors, especially those related to syntax; however, within the scope of this thesis it is impossible to investigate all of them. Therefore, this study will focus in detail on two aspects of Indonesian syntax: firstly, the acquisition of negation; secondly, the acquisition of the predicative adjective and the attributive adjective. The syntax of negation and syntax of adjectives are some of the first grammatical features taught in most Indonesian courses, and there are some particular areas of difficulty for learners in acquiring these structures. I therefore decided to use these structures, since they provide a good picture of the early development of the learners' language.

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[1] I use the term second language acquisition to refer to both second and foreign language learning, as used by Gass (1997: ix). In the Australian Capital Territory (ACT), where the data were collected, Indonesian is treated as a foreign language.

ii. Aims and Objectives

My aim is to investigate the development of the learners' language with regard to negation and adjectival syntax. I will consider the learners' path to acquisition and the subsequent development of their language forms. This development is compared with the target language grammar in order to investigate the learners' possible perceptions at different points of time on their route towards acquisition. Interpretations of their interim development - some of which are speculative - are also presented in order to see the changes of forms in the learners' language productions over time.

The objectives of the study are to check whether language input from a formal teaching environment affects the learners' development and also to determine the length of the gap between the formal input and the acquisition of the areas of grammar being investigated. I hope to be able to provide some guidance for practising Indonesian teachers; in particular by presenting the developmental order for negation and adjectival syntax in the learners' language, and relating this to the teaching input.

iii. Organisation of the Thesis

This thesis is divided into six chapters, as follows:

Chapter One provides a basis for the present study by describing some of the influential and relevant research that has been done over the last three decades on language acquisition either of first or second language.

Chapter Two describes the methodology adopted in this study. In particular the data collection methods and the acquisition criteria are discussed.

Chapter Three outlines basic Indonesian grammar, concentrating on the structures being investigated in this study; that is, the syntax of negation and adjectives.

Chapter Four investigates the learners' acquisition and development of the Indonesian syntax of negation. The learners' production is analysed in detail, and a description is provided of the development patterns of the learners' language and their errors.

Chapter Five presents an analysis and interpretation of the learners' acquisition and development of predicative adjectives and attributive adjectives. This chapter also describes some of the patterns and errors that occur in the learners' production, in particular in the complex phrases.

Chapter Six examines the gaps between teaching input and acquisition, and considers the implications for teaching the negation and adjective structures. Finally, a number of conclusions are drawn and some suggestions for future research are provided.

CHAPTER ONE

LANGUAGE ACQUISITION STUDIES: A REVIEW

1.1 Introduction

In this chapter, I will present a review of the development of theories of language acquisition, together with a description of studies of language acquisition which are related to my own study. My intention is to provide a background to my own research: I am not seeking to provide a complete history of the development of language acquisition theory, or to provide a summary of the large number of experimental and descriptive studies which have been conducted in language acquisition. Indeed, to do so within the scope of this thesis would not be possible. Therefore, I will concentrate on studies that are most relevant to my own study.

The chapter is divided into three main sections. In the first (1.2), I describe the development of the concept of interlanguage, with specific reference to the work of Corder (1967) and Selinker (1972). The second section (1.3) deals with a number of studies that have developed out of the concept of interlanguage, in an attempt to provide an explanatory framework for observed sequences in language acquisition. Finally, in (1.4), I will review the very small body of literature on the acquisition of Indonesian, as either a first or second language, by discussing studies by Dardjowidjojo (2000), Gould (1998) and Adnan(1994, 1998).

1.2 The Concept of Interlanguage and its Development

The concept of interlanguage which has developed since the late 1960s is based on the following assumptions: that second language learners dynamically develop their own internal grammar of the target language;

that this is a systematic process; and that there will be basic similarities in the interlanguages of all learners of a particular target language. This is in contrast to the previous behaviourist accounts of language acquisition such as that of Lado (1957), which focused on the idea of imitative learning mechanisms and the degree of deviance from target language (TL) norms. Lado described a system called Contrastive Analysis, which involves a detailed comparison of the first language (L1) and and the second language (L2) in terms of their phonology, grammar, writing system and culture. He hypothesised that learners would find most difficulty in learning those aspects of the L2 that differed most from the L1; whereas those aspects where the L1 and L2 were similar would not present a problem. In other words, Contrastive Analysis focused on the differences between the L1 and L2, and assumed that learners' behaviour could be predicted from the comparison (cf James 1980).

In the following sections, I will describe the early development of the concept of interlanguage, describing the views of Corder (1967), Selinker (1972) and to a lesser degree Nemser (1971a, 1971b), since these three linguists provided much of the impetus for the different perspective in second language learning. There have been many subsequent studies based on the concept of dynamic learner language: I will touch only briefly on those of Schumann (1976b), Dulay and Burt (1974) and Krashen (1977).

1.2.1 Transitional Language System

In contrast to behaviourist accounts such as Lado's (1957), Corder (1967) argues that the acquisition of a second language should be viewed in much the same way as the acquisition of a first language, because the learner is developing linguistic competence through a process of hypothesising and creating rules. Rather than concentrating on the occurrence of errors, Corder views the ability to hypothesise and create rules as evidence of the

development of the learner's "transitional competence" (Corder 1967:25), as the learner attempts to make sense of the input received and organise the language information into a coherent structure.

The transitional language system is, in effect, the result of a rule building process: the learner is receiving input in and about the TL, and is using this input to construct hypotheses about the TL. This allows the learner to communicate in and understand the target language.[1] Corder in fact divides the output from the transitional language system into two parts: first, the rules devised by the system builder; and second, the production and comprehension of messages according to the rules the system builder has devised.[2]

The ultimate objective of the transitional system is to approach the actual system of the target language. The transitional system is dynamic, and learners compare the input received with their internal hypotheses and rules. If necessary, they then modify the transitional language system in response to new input. As a result, some of the utterances produced by the transitional system may conform to the standards or rules of the target language, while others may not. For example, in the process of learning the past tense of irregular verbs in English, learners may start by learning the *-ed* ending used with regular verbs, such as *walked* and *pulled,* and extending this to irregular verbs - thus producing *runned*.[3] In the process of comparing the input received against the rules of the transitional system, it would be recognised that the initial hypothesis was incorrect, and this would be recast to move closer to the native system, so that finally, the learners would produce *ran*.

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[1] Corder's (1967) view incorporates the learner interpreting as well as producing the TL.

[2] Chomsky (1965) refers to these two notions as "competence" vs "performance".

[3] This is an illustrative example: Corder does not use this example.

With regard to the process of rule building, Corder postulates that a language learner's initial hypotheses will be based on the first language system, and these will then be tested to see whether the second language is the same or different. Thus, the development of the transitional system is, in a sense, a process of restructuring the first language system. This process of hypothesising will not, in general, be conscious, although it may involve similar processes to the process of conscious hypothesising undertaken by a professional linguist. The process will also result in a system which is unique to an individual and Corder uses the term "idiosyncratic dialect" (Corder 1971:148) - although the transitional systems of learners from the same language background and with similar experience of learning a language may be very similar.

Corder does not address the question of why many learners have difficulty learning a second language in any great detail. However, he does in a later article propose that learners may have a "built in syllabus" (Corder 1981:9) for learning the language. This is seen as a pre-programmed internal sequence for learning aspects of the target grammar, which may not coincide with the imposed teaching syllabus. Corder here makes a distinction between "input" - what is taught or presented to the learner - and "intake". The latter is what the learner is actually able to use in the transitional language system, as determined by the learner's internal programme. Thus, the teacher may introduce examples of a particular rule - say the English third person singular verb ending *-s*. However, if the learner is not ready to learn this rule according to the internal syllabus, it will not be taken into the transitional system. As a result, the learner may appear to be 'stupid' or 'stubborn', but in fact should not be seen as being responsible for the failure to acquire. This last is an important point, and has been taken up by several subsequent interlanguage studies (e.g. Krashen and Seliger 1975; Hatch and Wagner-Gough 1976; Long 1985) which attempt to identify sequences in language acquisition.

1.2.2 Interlanguage Hypothesis

The term "interlanguage" was introduced by Selinker (1972) to describe the separate linguistic systems used by second language learners. Selinker's approach differed in some fundamental respects from Corder (1967); Selinker is concerned more with the differences between first and second language learning. He proposes that the psychological basis for second language acquisition differs from the mechanism used for first language acquisition. His hypothesis is based on the argument that there is a critical period for language learning. This hypothesis, originally advanced by Lenneberg (1967), proposes that there is a "critical period",[4] prior to puberty, after which the complete mastery of a language is impossible.

Accordingly, Selinker proposes that second language acquisition must use different mechanisms, because the original mechanisms have atrophied. In his original hypothesis, Selinker applied this only to adult second language acquisition, maintaining that adults use a different, and less successful learning process to children. He did not consider the situation of children learning a second language who, according to this argument, would still have access to the original Language Acquisition Device (LAD)[5] (Chomsky 1965, 1968) and should therefore be able to acquire a second language without undue difficulty. However, observations of children in Canada learning a second language indicated that these children were using interlanguage forms (such as language transfer), rather than child language (Naiman 1974). As a result, Selinker modified his original claim (Selinker et al. 1975) to extend the "interlanguage hypothesis" to include children learning a second language, provided this is not concurrent with learning

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[4] In child language development there is a period when language can be acquired more easily than at any other time. According to the biologist Lenneberg (1967) language learning may be more difficult after puberty (age 12 or 13 years), because the brain lacks the ability for adaptation (Richards, Platt and Webber 1987:68).

[5] The capacity to acquire one's first language, when this capacity is pictured as a sort of mechanism or apparatus. It also refers to the basic knowledge about the nature and structure of human language (Richards, Platt and Webber 1987: 154).

their first language and does not occur in a native-speaking environment. Thus, only children who were simultaneously learning two languages (L1a and L1b) would produce child language rather than interlanguage forms.

In Selinker's original explanation of the patterns of learner language, five central processes involved in the production of interlanguage are proposed (Selinker 1972):

1) *Language Transfer*: Unlike the behaviourist explanation, where language transfer was the sole process at work, which could be used to explain any difficulties, Selinker's view was that transfer was not an automatic transfer of habits. Rather, it was one of a set of options available to the learner to assist in organising the second language input. Language transfer still had an important role to play, but other processes are also involved.

2) *Overgeneralisation*: Learners might overgeneralise rules in the target language, leading them to make errors, without any reference to L1 forms. These kinds of errors had been found in studies of learners of English (e.g. Duskovà 1969; Arabski 1971), and have been one of the reasons for moving away from the original habit-formation model. For example, after learning the present progressive tense, a learner might use it to form the following sentences (1) and (2):

(1) *I am reading the answer.*
(2) **I am knowing the answer.*

Sentence (2) would not generally be accepted by native speakers. Thus the learner is over-extending the learned rule for the active verb *to read* and applying it inappropriately to the stative verb *to know*.

3) *Transfer of Training*: In some cases, the input received by the learner may lead to acquisition of a non-native result. This could be because the teacher or the textbook unwittingly creates a false impression of the target language. For example, putting too much emphasis on a particular feature of the target language, which is considered difficult to acquire, may create the impression that the structure is more frequently used than in fact it is.

4) *Strategies of Language Learning*: It may be that the learner makes a deliberate, and identifiable, attempt to approach the material to be learned, or to solve a particular problem. This would be classed as a "strategy of language learning".

5) *Strategies of Second Language Communication*: Similarly, if the learner adopts a particular approach in order to communicate in the target language, this would be a strategy of communication.

Selinker admits that the last two processes, the strategies of language learning and of second language communication, would be difficult to identify (1972: 219). However, he uses the example of simplification as an example of a possible strategy which could be used by the language learner to reduce the target language to a simpler system. Selinker also states (but without much elaboration) that there may be other processes at work, beyond the five central ones, which may also account for parts of the surface form of the interlanguage (1972: 220).

Whereas Corder was concerned with the evolution of the intermediate system, Selinker's view of interlanguage was more concerned with the final form of the learner's language. In the vast majority of cases, the learner's language system stops some way short of native speaker competence (Selinker, 1972: 212): Selinker called this final form of interlanguage

"fossilization". The role of language teaching is to postpone this stagnation of learner language for as long as possible.

1.2.3 Approximative System

When studying the development of interlanguage theory, it is important to recognise the crucial contribution of Nemser's (1971a, 1971b) experimental studies. Nemser recognised that studies using Contrastive Analysis principles[6] in the informal observation of second language learning were defective. His studies pioneered the use of precise perception and production tests of phonological contrasts between languages. It must be remembered that, while experimental studies on interlanguage data are fairly common these days, prior to the 1960s this type of language research was unknown.

Nemser's study (1971b) involved eleven Hungarian speakers who had recently arrived in the United States. They had no prior knowledge of English. The respondents were tested to examine how they perceived and produced various English sounds - specifically, the English interdental fricatives such as /θ/, as well as various stops such as /p, t, k/. Hungarian does have stops which are equivalent to those in English, but the interdental fricatives do not exist in Hungarian.

The results of the study were mixed. Although the predictions of Contrastive Analysis were reasonably accurate with regard to the perception and production of the stops, where equivalent sounds occur in both English and Hungarian, the uniquely English fricatives did not produce such clear

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[6] The comparison of two languages systems, for example, the sound system or the grammatical system. Difficulties in language learning are caused by L1. These difficulties can be predicted by comparing the language systems between L1 and L2, therefore teaching materials are designed to reduce the effect of L1 interference (Richards, Platt and Webber 1987: 63).

results. Accordingly, Nemser observed that the 'test data contains numerous examples of elements which do not have their origin in either phonemic system' (Nemser 1971a:134-135). In other words, many of the sounds produced by the respondents do not occur in either Hungarian or English, but are the result of the learners attempting to approximate English sounds and producing an "intermediate" sound that is not attributable to either the native language (NL) or target language (TL) form. Contrastive Analysis would predict that the sounds produced would originate either from the native language or the target language.

Essentially, Nemser's experimental work results in his assumption that the learners' speech production is the result of the 'patterned product of a linguistic system' (Nemser 1971b:116), a system which is distinct from both the native language and the target language and with its own internal structure.

Nemser's conclusion is similar to the interlanguage proposals put forward later by Corder (1967) and Selinker (1972). Nemser refers to an "approximative system", as learners move toward the TL. However, there is a difference in emphasis with Nemser seeing the approximative systems as 'the deviant linguistic system actually employed by the learner attempting to utilize the target language' (Nemser 1971b:116).

Subsequent researchers have built on the work of Corder, Selinker and Nemser. There have been many studies investigating how learner language develops, based on the idea that learners' language is a system distinct from both the L1 and the L2. I will describe a few of these studies in the following sections.

1.2.4 Morpheme Order Studies

Some studies which attempted to investigate the learners' system in language learning are those of Dulay and Burt (1972, 1974); Fathman (1975a); Larsen-Freeman (1976); and Krashen, Sferlazza, Feldman and Fathman (1976), which investigated the acquisition of a number of grammatical morphemes by learners of English as a second language. These "morpheme order studies" were intended to test whether there are universal mechanisms or strategies used in the acquisition of a second language.

Dulay and Burt conducted their studies of English as a second language (ESL) acquisition among children of different language backgrounds (Dulay and Burt 1974). As well as investigating whether there were universal strategies used in the children's language acquisition, they also wished to examine whether the acquisition process was guided by the first language or the second language. If the latter, they posited that the general sequence of acquisition of English sentence structures should not vary greatly between groups of learners from different language backgrounds.

The first studies (Dulay and Burt 1972, 1974) were based on error analysis: they studied the errors made in learning English by students from different language groups. It was found that the types of errors made were strikingly similar, showing that the ways in which children from different groups reconstruct English syntax are broadly similar. The kinds of errors which were produced reflected the process of "creative construction"; that is, the process by which learners gradually resolve the speech they hear into a system. During this process, learners are guided by universal mechanisms, causing their hypotheses to be formulated in certain ways, until the learner's language system approaches that of the target language.

In order to test their hypothesis that there was a natural sequence of acquisition, Dulay and Burt (1974) conducted a cross-sectional survey of 115

children, aged between 6 and 8 years, who were learning English as a second language in New York. The researchers used the "Bilingual Syntax Measure" as a method of eliciting and recording speech from the subjects. This method consisted of a set of pictures and related questions, which were designed so that there were ample opportunities for the children to use the desired functors.[7] In this study, the researchers concentrated on morphological aspects of English such as: plural markers, possessives, verb markers (regular, irregular, progressive aspect), articles, auxiliaries, and contracted copulas. In order to fulfil the acquisition criteria the features had to be scored at the range of 90% in the obligatory contexts (cf. Brown 1973).

By computing the scores for the overall group and ranking them with respect to each feature, Dulay and Burt concluded that there is indeed an apparent order for the acquisition of the English functors investigated.

Essentially, the features which scored the lowest percentage of correct applications were the most complex and therefore acquired last. The researchers also found that the acquisition profiles for children from different language backgrounds were very similar for all the features examined.

The congruence between the order of acquisition of features seems to show that it is the L2 system, rather than the first language, which guides the second language acquisition process. This observation was further elaborated through later studies to provide a theoretical background for the observed acquisition order (Dulay et al. 1982). The process of "creative construction" relies on the learner creating a second language grammar based on the input received from the environment. This process is driven by processes that are essentially the same as those used in first language acquisition, though the

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[7] Function words which have little meaning on their own, but whose meaning is apparent when they are used in relation to grammatical functions, such as plural marker *-s*, possessive marker *'s*, article *the* (cf Richards, Platt and Webber 1987:61).

pre-programmed sequence is not necessarily identical to the L1 sequence. It is also important that the process takes place subconsciously - thus it is not possible to control the process directly. Rather, the process of development relies on the learner receiving input which provides examples of the next feature on the developmental program. Once this input has been received and understood, the acquisition of that target form should occur. This hypothesis of comprehensible input was developed further by Stephen Krashen (1977), and this will be described below (1.3.1).

While the creative construction hypothesis claims to show that there is a pre-programmed order of development for language, most of the studies done on morpheme order are essentially descriptive. The studies have also been largely concerned with a relatively small number of linguistic forms in a single language, English. The actual process of development has not been examined in great detail, nor are the studies really useful for predictive purposes. That is, to determine an acquisition order for other languages would require descriptive morpheme order studies of these languages. It is also questionable whether the accuracy measure used by Dulay and Burt does reveal the acquisition order. Hakuta (1974) and Rosansky (1976) used longitudinal studies to test whether the acquisition order was the same as the accuracy order. Their results suggested that it was not.

1.2.5 The Pidginization Hypothesis

A further study on how learners develop their own system when learning a new language was undertaken by John Schumann. Schumann (1976b, 1978b, 1978c) advanced his pidginization hypothesis[8] based on his research in 1973.

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[8] L2 learners develop a pidginized form (non-TL form), when they regard themselves as socially distanced from the L2 speakers, and the language is used for limited functions (Richards, Platt and Webber 1987: 219).

The patterns of development noted by Schumann are of interest here since they include the development of negation among second language learners.

Schumann argues that there are parallels between the early stages of second language acquisition and pidgin languages; that is, that both are simplified forms of language used for communication of referential, denotative information between speakers of different languages. Pidgin languages and the early second language acquisition (SLA) stages both represent a basic language; possibly this is similar to the "simple codes" of child language which Corder (1975) suggests may be close to the underlying structure of all languages. Of course, second language acquisition will usually progress, and the language will expand through the process of learning to come nearer to the target language.

The research on which the hypothesis was based was a ten month longitudinal study of the acquisition of English by six speakers of Spanish. The study focused on the acquisition of several features including *wh*-questions, negation and auxiliaries. Schumann noted that there were clear patterns of development among the learners for all the features; for example, the stages of developing negation were:

1. No + V
2. (unanalysed) don't + V
3. auxiliary + negative
4. (analysed) don't

(Schumann 1978b: 257, from Alberto's sample)

In stage one the negative particle *no* appears to be positioned internal in the sentence, but external to the verb: *I no can see. But no is mine.* The difference between stage two and stage four is that, in the earlier stage, *don't* is treated as an unanalysed chunk, used in much the same way as *no* (external to the verb) in the previous stage: *I don't can explain,* whereas in

stage four, the learners were able to use *do* plus the negative particle correctly: *It doesn't spin. Because you didn't bring*. In stage three the first auxiliaries to be negated were *is* (*isn't*) and *can* (*can't*) (Schumann 1978b, emphasis added). Schumann noticed that similar stages of development for the other features such as *wh*-questions and auxiliaries.[9]

Although Schumann's study does reveal that there are stages which are common to the interlanguage development of all the learners, he does not elaborate much on this point. His study focuses on a very small part of a single language, and does not explain the learners' development, or relate it to any broader theory of language acquisition.[10]

The foregoing accounts of the work of Schumann (1976b, 1978b, 1978c) and of Dulay and Burt (1972, 1974) provide examples of how the study of interlanguage has developed. These studies were essentially descriptive, trying to show that there was a pattern in the development of learners' language. Although it was hypothesised that the acquisition of a second language involved universal mechanisms, there was no elaboration of what those mechanisms might be.

1.3 Language Acquisition and Theoretical Approaches

In the following pages, I will touch briefly on subsequent and recent developments in the study of language acquisition, focusing on some of the explanations for orders of acquisition, as well as on the effect of input in SLA, before looking at specific studies that are of direct relevance to my

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[9] See Schumann (1978b, 1978c) for a complete discussion.

[10] The second part of Schumann's argument - dealing with social and psychological factors which may be impediments to second language acquisition - seems to have universal application (see Schumann 1976a, 1978b, 1978c). This is, however, outside the scope of my thesis, so I will not discuss it here.

present study. I will not deal with the role of Universal Grammar (UG) (Chomsky 1965, 1967, 1981a, 1981b) in second language acquisition. This is not intended to imply that UG does not have a role in SLA; but this role is still the subject of debate and it is still unclear how the framework should be extended to second language acquisition. For example, Schwartz and Sprouse (1994, 1996) argue that second language learners have full access to UG, while Felix (1984), Clahsen and Muysken (1986) and Meisel (1983, 1991) propose that L2 learners have limited or no access to UG.

1.3.1 The Monitor Model

In the light of Morpheme Order Studies in the 1970s, Krashen (1977) came forward with a theoretical framework of second language learning. The Monitor Model (initially the Monitor Hypothesis) proposed by Krashen has been very influential, especially among language teachers. The model comprises five basic hypotheses:

1) *The Acquisition - Learning Hypothesis;*
2) *The Natural Order Hypothesis;*
3) *The Monitor Hypothesis;*
4) *The Input Hypothesis;*
5) *The Affective Filter Hypothesis.*

The combination of these five sub-systems is intended to provide an explanation of the process of second language acquisition, as well as to explain some of the features of learners' language development. I will give a brief summary of each of the hypotheses, before discussing some of the possible problems with Krashen's approach.

The Acquisition - Learning Hypothesis proposes two separate mechanisms for developing knowledge of a second language: *acquisition* and *learning*.

Acquisition is described as a subconscious process, similar to the way in which a child acquires a first language:

> ... language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using the language for communication. The result of language acquisition, acquired competence, is also subconscious. We are generally not consciously aware of the rules of the languages we have acquired. Instead, we have a '"feel" for correctness. Grammatical sentences "sound" right, or "feel" right, and errors feel wrong, even if we do not consciously know what rule was violated. (Krashen 1982:10)

In other words, acquisition is the process of "picking up" a language through informal learning and exposure to the language in a natural setting. In contrast, "learning" is the process of gaining formal knowledge of the structure and grammatical rules of the language. Not only is the learning derived through a separate process, Krashen argues that the knowledge thus gained remains internalised differently, and the two types of knowledge are not interchangeable. Thus, knowledge gained through learning cannot be used in the same way as knowledge gained through acquisition in the production of language.

Krashen maintains that the function of the learned language system is to monitor and correct output from the acquired system. Thus, according to the Monitor Hypothesis, it is simply not possible to use knowledge gained from formal learning in order to produce or understand utterances in the target language; indeed, Krashen states that learned language cannot be used at all in comprehension (1977, 1982, 1985). Unlike the way in which acquired language can be used in production and comprehension, the learned language, and hence the monitor, operates at a conscious level. However, the monitor will not be operational at all times: Krashen maintains that there are three conditions required for the monitor to operate, although the monitor may still not operate even if these conditions are met. The necessary conditions are:

1) *Time*: learners need time to be able to think about and apply the rules from the learned system;
2) *Focus on Form*: the learner must be paying attention to *how* he or she is saying something;
3) *Know the Rule*: obviously, in order to apply a particular rule, one must first have learned it.

Having stated that learners can only become proficient in a second language through a process of acquisition, Krashen argues that the process by which learners acquire the target language is a combination of the Natural Order Hypothesis and the Input Hypothesis. He argues that the elements of a language will be acquired in a predictable order (the Natural Order Hypothesis), which does not vary, regardless of whether the learner receives formal instruction or not. Krashen's "natural order" is based on the results of morpheme order studies by Dulay and Burt (1974) on the order of acquisition in children, and is comparable to that work, in that the natural sequence of learning a language for adults is broadly similar, regardless of the learner's first language (Bailey, Madden and Krashen 1974).

With a determined order of acquisition, Krashen argues that learners acquire a language by receiving comprehensible input (Krashen 1985:2). This input should contain structures typical of the next stage in the natural order of acquisition of the language. Krashen defines the current state of a learner's language as *i*, and the next stage of acquisition as $i + 1$; in other words, input should consist of language features (i+1) which are slightly ahead of the learner's current state of acquisition (i). If a learner receives input at stage $i + 1$, the learner will automatically acquire the next stage of the language. Krashen assumes there is an inbuilt mental structure, or Language Acquisition Device (Chomsky 1965, 1968), which operates for both first and second language acquisition. Receiving input activates this device, and thus leads to acquisition of the language. However, language which is

too far in advance of the learner's current stage will not result in acquisition: the learner simply will not have the ability to understand the input, and thus it will have no effect on the learner's language.

There is a difficulty with the hypothesis that comprehensible input will automatically result in acquisition. Put simply, the hypothesis does not fit with the observation that many second language learners do not acquire elements of the language (Meisel 1980, Pienemann 1984, Pienemann 1998) despite being exposed to sufficient input. Krashen's explanation is that in some cases the required input is filtered out. The proposed "affective filter" includes a number of factors which may impact on language acquisition such as: motivation, self-confidence and attitude. So, if the filter is up, input will not be received; it is only when the filter is down, and the input received is "comprehensible" that acquisition will take place.

In practical terms, the presence of the affective filter in Krashen's theory makes verification of his hypotheses difficult: if a learner receives input at the required level, yet fails to acquire the feature, does this run counter to the Input Hypothesis, or is it simply that the filter is up? Similarly, with the Monitor Hypothesis, it is not possible to know when the monitor is operating. Although it is true that learners and native speakers do monitor their speech, and correct it when an error is detected, this does not necessarily mean that the correction is coming from a separate system. In fact, with native speakers, it would seem unlikely that such corrections would come entirely from formal learning. Further, the separation of the two language systems creates conceptual difficulties. If, for example, students were to learn a second language entirely from formal instruction delivered in the L1, it would then not be possible for them to produce any output in L2, since formal, learned language can only be used for monitoring and can never result in fluent, unconscious speech. Nor would learners in this situation be able to advance by receiving "comprehensible input" in the target language.

In summary, Krashen's proposed Monitor Model is abstract and hard to verify. It thus provides an opportunity for other researchers such as Meisel, Pienemann and Clahsen (Clahsen 1980; Pienemann 1980, 1981; Meisel et al. 1981; Clahsen et al. 1983) to find a verifiable explanation of second language acquisition using the Multi-Dimensional Model, which will be discussed next.

1.3.2 Multi Dimensional Model

In the 1970s, a group of researchers, namely Clahsen, Meisel and Pienemann (under the direction of Jürgen Meisel) conducted the ZISA[11] project (see Clahsen 1980; Pienemann 1980, 1981; Meisel et al. 1981; Clahsen et al. 1983), in order to focus on learners' language development. The project included a cross-sectional study of 45 adults, together with a longitudinal study of 12 adults, all Italian and Spanish migrant workers, who were learning German as a second language (GSL). The study, which resulted in a range of findings on the acquisition sequence of German as a second language, proposed a framework named The Multi-Dimensional Model for determining the sequence of second language acquisition. It considered word order and morphology as well as the processing strategies which can account for stages in the acquisition of the TL.

Meisel, Clahsen and Pienemann found that, after an initial period of using isolated words and formulas, all learners followed the same five-stage sequence in the development of their interlanguage, as shown in Figure 1.1.

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[11] Zweitsprachenwerb Italienischer und Spanischer Arbeiter: second language acquisition by Italian and Spanish workers. A project initially conducted at the University of Wuppertal 1974 .

Figure 1.1: Developmental Sequence for GSL Word Order Rules

Stage X	Canonical Order (SVO)
	die kinder spielen mim ball
	the children play with the ball
Stage X+1	Adverb preposing (ADV)
	da kinder spielen
	there children play
Stage X+2	Verb separation (SEP)
	alle kinder muss die pause machen
	all children *must* the break *have*
Stage X+3	Inversion (INV)
	dann hat sie wieder die knoch gebringt
	then *has she* again the bone *brought*
Stage X+4	Verb-end (V-END)
	er sagte, dass er nach hause kommt
	he said that he home *comes*

(Pienemann 1985:35-37)

Clahsen (1984) explains this developmental sequence in terms of "language processing strategies", where it is processing complexity that determines the order in which linguistic structures will be acquired, with the more complex structures (such as subordinate clauses) being acquired later.

An important feature of the developmental sequence is that learners acquire a rule only if all the preceding rules have also been acquired. Thus, if learners have reached the SEP stage (X+2), this implies that they must also have acquired SVO and ADV. Underlying the five stages of development, there are three speech processing strategies used by learners (Clahsen 1981, 1984, 1987; Pienemann 1985a), which work together to constrain how learners can process utterances at a particular stage of the development of their interlanguage. Clahsen (1984) identified the three strategies:

> Canonical Order Strategy (COS) - underlying meaning is mapped directly onto syntactic form.
>
> Initialization-Finalization Strategy - movement of elements to internal positions in sequences is blocked, so that [XYZ] can be re-arranged to [YZX] or [ZXY], but not [YXZ] or [XZY].
>
> Subordinate Clause Strategy - permutations of elements in subordinate clauses are avoided.
>
> (Clahsen 1984: 221-222)

These strategies are postulated to work in the stages of acquisition as shown below:

Stage X — at this simplest stage, learners sequence their utterances according to meaning; there is no knowledge of or analysis of grammatical elements.

Stage X + 1 — the COS remains intact: learners are simply moving elements from one salient position in the string to another (initial to final or vice versa); and there is still no need for any knowledge of grammatical categories.

Stage X + 2 — in the verb separation stage, the COS is disturbed: the string can be disrupted as one element is removed and moved to a salient position. The SVO order alone is therefore no longer adequate; in addition, the learner must recognise the element being moved as belonging to a particular grammatical category.

Stage X + 3 — at this stage, elements of the string can be moved within the string, from one internal position to another: in other words, the Initial-Final Strategy is disrupted.

Stage X + 4 in the final stage of acquisition, the learner needs the ability to process a hierarchical structure; he or she must be able to identify sub-strings and move elements of the sub-string to other positions within the sub-string.

(adapted from Larsen-Freeman and Long 1991: 274 - 275)

Although the development sequence was developed specifically for German word order, it was argued that the principles and constraints involved are universal, controlling all development sequences for interlanguages. Thus, the acquisition sequence incorporating the five-stage developmental process and the processing strategies (cf. Clahsen 1984) should be capable of extension to other languages (Larsen-Freeman and Long 1991). It should also be true that the development sequence will not be affected by the language learning context: in other words, the model should be applicable either to formal or natural learning and should be applicable both to child and adult SLA.

Studies of the second language acquisition of German (Pienemann 1984, 1987; Eubank 1986, 1987; Jansen 1987; Ellis 1989) appear to confirm the validity of the prediction that learners follow a fixed sequence. The framework has also been adapted to studies of other languages, including the acquisition of English (Pienemann and Johnston 1987) and Japanese (Doi and Yoshioka 1987; Yoshioka and Doi 1988).

As well as the development sequence, Clahsen, Meisel and Pienemann included a variation dimension in the model (hence, the Multi-Dimensional Model). Variation is intended to take account of the observation that some learners in the ZISA study exhibited a variety of acquisition paths. Although the central developmental sequences are common to all learners, some learners were concerned with producing the

language as accurately as possible, while others tended to sacrifice some accuracy in order to communicate more effectively. This variation in styles showed how learners approached the use of several functors, including articles, prepositions, and copulas (Clahsen, Meisel and Pienemann 1983). In this study, it appeared that some learners supplied the copula as soon as they began to produce attributive or equational utterances, such as *He is good*. On the other hand, other learners just as consistently omitted the copula, although it was noted that this second group tended to produce such utterances before the first group. The orientation of learners can vary over time - so a particular learner may use a simplified language at one stage of development, but not at another.

It was therefore postulated that some features of language, which are required for correct grammatical utterances but are redundant in terms of communication, can be termed variational features. These features are not governed by the developmental schedule, and they can therefore be learned or taught out of sequence (Pienemann 1984, 1988). The researchers did not give a complete definition of which features are variational, although they do make mention of two possible types of variational simplification (Meisel, Clahsen and Pienemann 1981):

> i) Restrictive simplification, where a grammatical feature is omitted (e.g. *She pretty*.).
> ii) Elaborative simplification, resulting from the extension of a feature to other situations, or over suppliance (e.g. *He swimmed*.).

Pienemann (1984, 1988) claims that the acquisition of variational features can be assisted by instruction. Since these features are not governed by processing constraints, they can be taught in any order, as soon as learners are able to produce them. However, with the developmental features, teachability depends on the students' readiness to learn the structures. Pienemann conducted a study of the effect of instruction on Italian children

learning German as a second language (Pienemann 1984, 1989). He found that teaching stage X + 3 to learners who were at stages X or X + 1 had no effect - the learners did not advance beyond their existing stages. By contrast, learners at stage X + 2 showed positive effects when given instruction in stage X + 3. Because the developmental features form an implicational hierarchy - so that it is not possible to skip steps in the development - Pienemann predicts that the teachability of a structure at any stage of development depends on the student's readiness to learn structures at that stage. Teaching structures out of sequence will not have any effect on acquisition.

Clahsen's (1984) explanation of the developmental sequence observed in the ZISA project concentrates on constraints to the acquisition of language. This means that his approach does not provide a clear explanation of the process by which grammatical features are acquired (or how learners learn). Also, there is not much elaboration on what constitute the variational features of language. This raises the question whether the acquisition of a particular form out of the predicted sequence disconfirms Clahsen's hypothesis; or is it simply that the feature is part of the variational dimension that has not been identified?

Despite this limitation, Clahsen's approach has an advantage over many previous models in that it is possible to test the model experimentally. As was mentioned previously, Pienemann's studies on the "Teachability Hypothesis" (1984, 1985, 1988) have shown the predictions of the "strategies approach, as Pienemann calls it (Pienemann 1998:47), to be remarkably solid. Perhaps its greatest strength is that it does not rely simply on observation of data. Because the developmental stages are explained in psycholinguistic terms, it is possible to use the approach for predictive purposes, as well as extend it to other aspects of language and to other languages. Because the "strategies approach" defines the acquisition sequence in terms of the development of processing strategies related to word order, it is quite

suitable for adaptation to the study of Indonesian SLA; as was done in Adnan's (1998) study of Indonesian SLA, which will be described below (section 1.4.3). Since Indonesian is an uninflected language, with no subject-verb agreement, tense markers or noun inflection, much of the acquisition process can be described in terms of the operation of processing strategies on word order.

One of the ZISA team members, Pienemann (1998), developed a model - Processability Theory - which could be used to predict the acquisition sequence of morphology and syntax, and could be extended to various languages. This theory will be described in the next section.

1.3.3 Teachability Hypothesis and Processability Theory

In this section, I will describe Manfred Pienemann's Teachability Hypothesis (1984, 1987, 1988) and his Processability Theory (1998), both of which developed out of Pienemann's work with the original ZISA project. I will describe Processability Theory first, followed by the Teachability Hypothesis, which will introduce a discussion of the effect of teaching on acquisition.

In Processability Theory, Pienemann presents a language processing model, describing language acquisition as a process of acquiring the skills to produce the target language. This process is incremental, so that it is not possible for learners to by-pass steps in the acquisition process - each stage implies that the procedures from the previous step have been acquired.

Processability Theory uses an embedded theory of grammar, Lexical Functional Grammar (LFG) (Kaplan and Bresnan 1982). The use of LFG as a tool for describing and analysing the structures of a language means that Processability Theory can be extended to many different languages.

Processability Theory describes the processing mechanism in terms of information exchange between the grammatical elements of a structure. This includes subject-verb agreement and gender and number agreements within a noun phrase. Thus, because the theory of grammar is integrated into the structure, Processability Theory provides a means of explaining and predicting the acquisition of morphology and syntax.

Pienemann's model is based on Levelt's (1989) model of language production. Levelt treats speech output as the product of an information processor comprising three parts: the conceptualizer, the formulator and the articulator. The conceptualizer is where ideas and concepts are generated before they are passed to the formulator, which draws information from the lexicon in order to build linguistic structures through a process of grammatical and phonological encoding. The "phonetic plan" is then passed on to the articulator which produces the actual output. Pienemann concentrates on the middle part of this model - the formulator - since this is where grammatical processing takes place. In Levelt's model, the formulator is based on an Incremental Procedural Grammar (Kempen and Hoenkamp 1987). Kempen and Hoenkamp (1987) and Levelt (1989) assume that sentence production is piecemeal or incremental. The different parts of the model can work simultaneously, so that the "next processor can start working on the still-incomplete output of the current processor..." (Levelt, 1989:24). In other words grammatical encoding occurs in the formulator, while the conceptualizer is working on the next piece of output. These processes occur automatically, that is, without conscious attention. The advantage of assuming that the specialist processing components work automatically and in parallel is that they can handle a large number of operations very quickly, without creating a load on short-term memory.

Adapting this model to the process of second language production, Pienemann points out that there are features of the formulator and the lexicon which will be language-specific and must be acquired by the learner;

at least in the case where the first and second languages are not closely related. These features include:

- Word order rules,
- Syntactic procedures and their specific stores,
- Diacritic parameters in the lexicon,
- The lexical category of lemmata,
- Functorisation rules.

(Pienemann, 1998:74)

Word order rules are, of course, language-specific, although related languages may have similar features. However, the learner cannot know this at the outset of learning a language and thus must be prepared to learn the whole range of features.

Syntactic procedures are used by the formulator to build constituent structures. When a lemma in the mental lexicon is activated, the process of grammatical encoding begins, based on grammatical information contained in the lemma, such as lexical category and argument structure. Thus, a lemma of category Noun (N) will build Noun Phrase (NP), Verb (V) will build Verb Phrase (VP), and so on. Once this process has delivered a completed phrase, the phrase must be related to the rest of the intended message in order to produce a fluent utterance. This is accomplished through a set of appointment rules, which assign a grammatical function to the completed phrase. For example, an NP may typically be assigned the function "the subject of Sentence (S)"; the components can then be combined into a single grammatical clause by a syntactic procedure depositing the elements into a data structure, or "holder", using the Word Order rules of the language, for configurational languages (Pienemann 1998: 65-70).

It will be noted from this that the lemmata are supplying information to the syntactic procedures; this includes their lexical category and diacritic information, such as number, tense, gender. The role of the functorisation rules (Kempen and Hoenkamp 1987) is to insert free grammatical morphemes and bound morphemes.

As stated above, the process of grammatical encoding, including the syntactic procedures, is automatic and is characterised by the ability to process a large amount of information at the high speed necessary to produce fluent speech. The syntactic procedures also have the ability to store information - this is necessary for storing information which, owing to the word order rules of language, may be presented in the final utterance in a fashion which differs from the natural or linear order of the proposition. For example, in the sentence *'Before the man rode off, he mounted his horse,'* the second part of the sentence in fact took place (temporally) before the first. Thus, in the process of producing this sentence, 'he mounted his horse' has to be temporarily stored and postponed until after the first part of the sentence is produced (Levelt 1983, Pienemann 1998:56).

Morphological processing also requires information storage; for example, in English subject-verb agreement, information about the number and person of the subject NP has to be stored until the verb is available for encoding, at which time it takes information from the proposition in order to form tense. Propositional and syntactic information are stored in separate areas - working memory is used for attended processing (Baddeley 1990, Levelt 1989) and is thus suitable for storing propositional information, which needs to have attention focused on it. But, because of the limited capacity of working memory and its inability to handle information at a sufficient speed to allow normal speech, the large amounts of syntactic information used by the formulator must be sent to an information store specifically designed for this purpose (Pienemann 1998:60). Finally, the lexicon is stored in permanent memory; this is open, at least partially, to continuous

processing to allow the formulator to access information. It is the lexicon which stores information defining the meaning of lexical items and also the syntax of each word - the stored lexical information has to interact, or "communicate" with other elements of the sentence in order to produce a grammatical utterance.

The exchange of grammatical information between different elements of the sentence is a key aspect of Processability Theory, serving as the basis for the proposed hierarchy of processing procedures. At the outset of learning a language, the L2 learner is unable to deposit information into syntactic procedures, because the L2 lexicon is not yet fully annotated, and also because the learner does not have the specialised syntactic procedures to hold L2 syntactic information. As a result, it is predicted that a beginning learner will be unable to produce any structures requiring the exchange of specific L2 grammatical information (Pienemann 1998:76).

Pienemann extends this basic prediction, formalising a set of language processing procedures which learners need to acquire in order to produce speech in the second language. These procedures are developed incrementally, starting with the less complex procedures, with more complex procedures being added as acquisition progresses, as follows:

Word/lemma: At the beginning stage of second language acquisition, learners will produce invariant forms, consisting of single words and stock phrases. These items will enter the lexicon, but their grammatical features will not be analysed. At this stage, because there is no exchange of grammatical information, learners do not require any language specific syntactic procedures, nor is there any need for grammatical information storage.

Category Procedure: At this stage, learners can produce lexical morphological markers, since some L2 lexical items have been assigned a grammatical

category. Exchange of grammatical information between elements is still blocked at this stage: the morphemes are activated by information originating in the Conceptualizer, or from the lexicon. In order to map semantic roles on to L2 forms, learners use simplified procedures requiring no information exchange, such as a strictly serial, or canonical, word order, similar to a Noun Verb Noun (NVN) word order (Bever 1970).

Phrasal Procedure: Once L2 phrasal procedures have been developed, allowing information exchange to take place between phrasal heads and modifiers, learners are able to produce phrasal morphemes. Thus, for example, the lexical entry for the French noun *table* 'table' includes the diacritic features 'gender=feminine' and 'number=singular'. The encoding process identifies these features and values, and uses them in the phrasal procedure to match them with the identical values stored in the lexical entry for *une* 'a', activating this lexical marker and producing the NP *une table* 'a table'. At this stage, the canonical word order from the previous procedure is still intact; however, learners are able to use positions external to the NVN word order using the non-linguistic principle of salience. This would give rise to the following type of phrasal word order:

INITIAL	agent	action	patient	FINAL
PP/Wh	NP	V	VP	

(Pienemann 1998:85)

S-Procedure: Following the development of phrasal procedures, learners can develop Appointment Rules and the S-Procedure, allowing the functional destination of phrases to be determined, so that phrases can be assembled into sentences. Information exchange can occur across phrases, so that, for example, the diacritic features of a subject NP (such as 'number' and 'person') can be stored and used to match the VP when this is delivered.

S'-Procedure: The S' Procedure is really an extension of the S-Procedure, to allow for S to be called as a sub-procedure. Pienemann (1998:86) argues that this cannot be done until additional elements, or 'Lemma Functions' are introduced to the lemma of verbs, allowing the processing of subordinate clauses.

The above procedures are organised in an implicational hierarchy, so that the processing procedures developed at one stage are prerequisites for the procedures of the following stage:

> A *word* needs to be added to the L2 lexicon before its *grammatical category* can be assigned. The grammatical category of a *lemma* is needed before a *category procedure* can be called. Only if the grammatical category of the head of phrase is assigned can the *phrasal procedure* be called. Only if the latter has been completed and its value returned can *Appointment Rules* determine the *function* of the phrase after which it can be attached to the *S-node*. Only after appointment Rules are refined by *'Lemma functions'* can subordinate clauses be formed - with their own structural properties.
>
> (Pienemann 1998:87)

The operation of the procedures described allows sequences of acquisition to be developed for different languages within Processability Theory, using LFG as an analytical as well as a descriptive tool. One of the reasons for using LFG in Processability Theory is its ability to account for the process of information exchange between constituent elements. This is described as "feature unification" in LFG (Bresnan 1982, 2001).

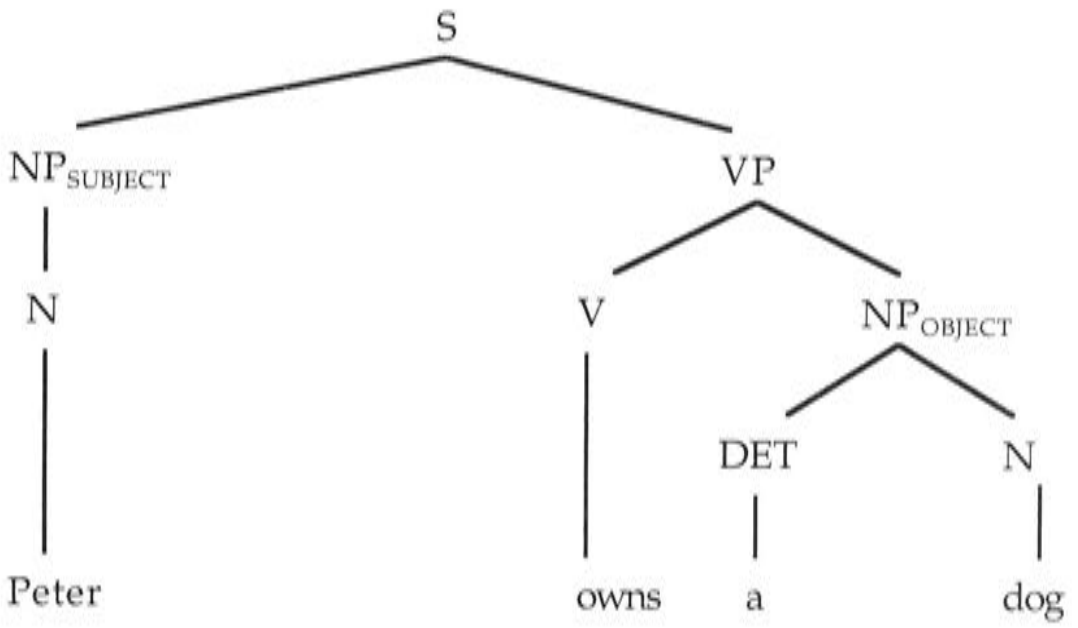
LFG comprises three elements: a constituent structure (c-structure) that generates surface structure constituents; the lexicon containing entries with syntactic and other information; and a functional component which

compiles the grammatical information required to interpret a sentence. These three components interact according to a set of rules constraining the process of feature unification, ensuring that sentences are well formed (Pienemann 1998:93).

As an example of how these three elements work together, Pienemann (1998:93-95) analyses the sentence 'Peter owns a dog'. The c-structure of this sentence is shown below:

Figure 1.2: C-structure Example

S ---> $NP_{SUBJECT}$ VP
NP ---> (DET) N
NP ---> V (NP_{OBJECT})



(Pienemann 1998:94)

The lexical entries for these items specify a number of syntactic and other features, which in most cases will define the values required (such as NUM=SG), as in this simplified example:

Figure 1.3: Lexical Entries

Peter:	N	PRED	= "Peter"
owns:	V	PRED	= "own" (SUBJ, OBJ)
		TENSE	= present
		SUBJ PERSON	= 3
		SUBJ NUM	= SG
a:	DET	SPEC	= "a"
		NUM	= SG
dog:	N	PRED	= "dog"
		NUM	= SG

(Pienemann 1998:94)

The last element in this sketch is the functional structure, or f-structure, which forms the link between the syntactic form and its predicate-argument relations, allowing the sentence to be interpreted. The predicate entry is taken from the lexical entry of the verb. The slots to the right of the verb (SUBJ, OBJ) are in this case occupied by grammatical functions marking the semantic relations associated with these functions:

Figure 1.4: Functional Structure

PRED	"own" (SUBJ, OBJ)	
	TENSE	present
SUBJ	PRED	"Peter"
OBJ	SPEC	"a"
	NUM	SG
	PRED	"dog"

(adapted from Pienemann 1998:95)

The processing procedures outlined above, together with LFG analysis, allow a developmental schedule to be designed for a range of languages. The stages

of acquisition are broadly in line with the corresponding processing procedures, although they may differ slightly depending on language-specific features. They are:

Stage 1	Word/Lemma
Stage 2	Category Procedure
Stage 3	Phrasal Procedure
Stage 4	S-Procedure
Stage 5	Sub-clause Procedure

Pienemann provides an example of how this would work in the case of German, accounting for both word order and morphological features of the language:

Figure 1.5: The General Picture for German

Stage	exchange of information	procedures	word order	morphology
6		sub-clause procedure	V-end	
5	inter-phrasal no saliency	S-procedure	INV	SV-agreement
4	inter-phrasal with saliency	simplified S- procedure	SEP	
3	phrasal	phrasal procedure	ADV	plural agreement
2	none	lexical categories	SVO	past-te etc.
1	none		words	

(Pienemann 1998:116)

Pienemann uses a case study of the acquisition of German by an Australian university student (Guy) to test the validity of these predictions. The study looked at the development of word order and verb morphology over a period of 19 weeks. Taking the acquisition of word order first, it was found

that Guy developed word order structures in the order predicted by the Processability theory, as illustrated below:

Week	Rule
1	SVO
7	Adverb preposing
15	Verb separation
19	Inversion
-	(V-end)

(adapted from Pienemann 1998:129)

It should be stressed that, although all the structures investigated were introduced during the first seven weeks of instruction, Guy's development followed the schedule predicted by Processability Theory, rather than following the teaching schedule. This indicates that Guy's development was constrained by his ability to process the structures investigated. In other words, he could not produce the structures until the relevant processing procedures had been developed.

Turning to the development of morphology, Pienemann predicted that this would be acquired in the following sequence:

1. Lexical morphemes;
2. Phrasal morphemes;
3. Inter-phrasal morphemes.

In general, it was found that Guy's acquisition order follows Pienemann's (1998) predicted framework. In his study, the lexical morpheme *ge-*, which in German is used to mark the past tense, was acquired before Subject Verb agreement in lexical verbs, which is classified as an inter-phrasal morpheme. Although there was a discrepancy in the results, in that Guy

seemed to acquire Subject Verb agreement with a pronoun-subject and the copula right from the start of the observation period, it was argued that this was evidence of learning invariant material, rather than actual evidence of acquisition of Subject Verb agreement.

A number of subsequent studies have been undertaken, and a number of previous studies have been reinterpreted in the light of Processability Theory. These studies involve a range of languages, including Swedish (Pienemann and Håkansson 1999); three Scandinavian languages (Glahn et al. 2001); German (Pienemann 1980, 1981, 1987; Jansen 1991; Boss 1996; Pienemann, Håkansson and Sayehli 2002); English (Johnston 1985, 1997); Japanese (Kawaguchi 1996; Huter 1996, 1998); Chinese (Zhang 2001). These studies demonstrate a high degree of uniformity in the development of morphosyntactic structures of language. This uniformity is the result of learners developing the procedural skills to process structures in the target language grammar.

Pienemann's (1984, 1987, 1988) Teachability Hypothesis can now be seen as part of the Processability Theory structure. There are two main predictions in the Teachability Hypothesis: first, that it is not possible to skip stages of acquisition through instruction; and second, that instruction focusing on structures from the "next stage" of acquisition will assist learners' acquisition.

Seen in the context of Processability Theory, the Teachability Hypothesis is based on the assumption that each stage of development requires a set of processing procedures, which are developed during the previous stage. Thus, it is not possible for learners to produce structures for which they have not developed the processing procedures; the processing procedures required to produce a structure are developed through the previous stages, and all the underlying procedures are required to produce the structure. If the formal instruction focuses on structures that are too far ahead of their

current stage of development, learners would not have developed all the necessary processing procedures and would therefore not be able to produce the structures.

The second part of the hypothesis predicts that, if formal instruction focuses on structures at the "next stage" of development, it will result in acquisition. Pienemann (1998) now adopts a more conservative approach to this prediction and suggests that, while instruction may promote acquisition, "there is no reason to assume that learners will acquire a structure just because they can process it. A functional need would have to be present for the structure to emerge" (Pienemann 1998:250). There may also be other specific components of individual rules, making the acquisition of these rules more complex.

In summary, Processability Theory provides a structured approach which can be used to define and predict the development of learners' grammatical systems in a variety of languages, based on the gradual acquisition of language processing skills. The theory can be used to predict the acquisition of morphology as well as syntax, through the medium of feature unification within LFG. The theory has been aimed mainly at languages such as German or English, which have differentiated morphology. To apply the theory to an uninflected language, such as Indonesian, would require a detailed analysis of the language on the basis of LFG. To date, no such analysis has been attempted. This would be a valuable direction for future research.

1.3.4 Input in Second Language Acquisition

In the light of the Teachability Hypothesis, it is worthwhile here to give a brief outline of some of the research into the effect of formal instruction on SLA. There are three aspects of learning that need to be examined when

considering the effects of formal instruction: the effect on acquisition order; the effect on the rate of acquisition; and the effect on the ultimate level of attainment.

The last of these three, the effect of formal instruction on the level of attainment, has been the least studied. Pavesi (1984) conducted a study comparing a group of Italian high school students studying English as a second language with a group of naturalistic acquirers - Italian workers living in Scotland, who had received little or no formal instruction. Pavesi found that the tutored group performed better than the naturalistic acquirers, although the two groups were not really comparable in terms of age or social and educational background.

Studies of the effect of teaching on the rate of acquisition have had mixed results. Eleven studies into the effect of classroom teaching were reviewed by Long (1983). Long found that six of these studies[12] showed faster development among children and adults who received formal second language instruction. Three studies (Upshur 1968, Mason 1971, Fathman 1975) showed little or no effect; while the final two (Hale and Budar 1970, Fathman 1976) were ambiguous, but it could be argued that they show some effect from teaching.

In Pienemann's (1984, 1987) study of Italian children learning German, the children were tutored, over a period of two weeks, in German subject-verb inversion in subordinate clauses. Pienemann classed this as a structure at stage X+3 (based on the Multi-Dimensional Model, see Figure 1.1). He found that those students who started out at stage X+2 advanced to stage X+3, whereas those who started at stage X+1 remained at the same stage, not advancing to stage X+3. This result implies that formal instruction can accelerate acquisition for students who are psycholinguistically ready to

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[12] Carroll (1967), Krashen, Seliger and Hartnett (1974), Krashen and Seliger (1976), Krashen, Jones, Zelinski and Usprich (1978) Chihara and Otter (1978) and Brière (1978).

acquire a structure, but that the sequence of acquisition cannot be altered. Thus, students who are not "ready" to acquire a structure will not benefit.

As well as Pienemann's (1984) study, there have been several other studies examining the effect of formal instruction on the order of second language acquisition. A number of morpheme order studies, for example Fathman (1975), Perkins and Larsen-Freeman (1975) and Turner (1978), found significant correlations between the morpheme order in classroom SLA and the order for naturalistic SLA; in other words, there was essentially no difference in the acquisition orders. Two other studies (Lightbown et al. 1980, Lightbown 1983) found that instruction could have some effect on the acquisition order, but that the effects were minor and not long lasting. In general, these morpheme order studies show that formal instruction does not have any marked effect on the order of acquisition.

The findings from the morpheme order studies are also supported by the findings from some longitudinal studies. Felix (1981) conducted a study of students in a German high school who were being instructed in L2 English. Felix concluded that, in the structures investigated, there were parallels between naturalistic and tutored SLA, and that the same learning processes were involved in both types of SLA. Ellis (1984) arrived at similar conclusions in a study of children learning English as a second language in Britain. Schumann's (1978a, 1978c) study, involving an attempt to tutor a single adult L2 learner in English negation, found that elicited utterances showed a marked improvement; but that spontaneous utterances did not show a significant change. Schumann concluded that instruction was effective in test-like situations, but that normal communication remained unaffected.

Krashen (1982) maintains that acquisition of a second language is the natural result of the learner receiving comprehensible input in the target language. Krashen argues that the effect of formal instruction is simply to provide

comprehensible input for learners, and that the value of instruction will be less for more advanced learners (who are able to obtain comprehensible input from other sources).

Alternatives to Krashen's position have been proposed by several scholars. These models are essentially similar in that they allow for the learned language to become acquired, either by acting as "acquisition facilitators" (Seliger 1979), or, as proposed by McLaughlin (1978), by suggesting that learners develop from "controlled" processing (which requires active attention) to "automatic" processing, which takes place without active control or attention. Sharwood-Smith (1981) builds on this model, arguing that the explicit knowledge gained from formal SLA instruction can be practised until it becomes automatic.

Lightbown and Spada (1999) have reviewed a number of studies of SLA, considering the effect of classroom instruction, and examining the differing theories of instruction, focusing especially on the proposals of Krashen (1982) and Pienemann (1984) described above. Lightbown and Spada looked at a number of studies of immersion programs, such as Lightbown (1992), as well as studies of instructed SLA (Spada 1987, Pienemann 1988, Harley 1989, Doughty 1991, Day and Sharpsen 1991). Although there are insufficient controlled studies to provide firm results, Lightbown and Spada found that comprehensible input is important in developing comprehension and fluency, and it has benefits for learners at early stages of development. However, the research does not support Krashen's position that content-focused instruction is sufficient by itself to produce mastery of the language; there is also a requirement for some form-focused instruction to deal with persistent errors. Lightbown and Spada conclude that a combination of form-focused instruction and corrective feedback within a communicative setting would be more effective than exclusive emphasis either on accuracy or fluency.

In summary, several studies tend to suggest that formal second language instruction has little, if any, effect on the order of acquisition, but that it has an effect on the rate and success of second language acquisition.

Most studies of the effect of formal input on SLA have been done on European languages. The following section will look at the state of current research in Indonesian SLA.

1.4 The Current State of Indonesian Language Acquisition Research

To date, there have been very few published studies into the acquisition of Indonesian, either as a first or second language. In the following sections, I will discuss studies by Dardjowidjojo (2000), Gould (1998) and Adnan (1994, 1998), focusing on the findings which are relevant to the structures being investigated in my study - that is, the syntax of negation and adjectives.

1.4.1 Indonesian as a First Language

There is only one major study into the acquisition of Indonesian as a first language. Dardjowidjojo (2000) conducted a very detailed longitudinal study on the acquisition of Indonesian as L1 in a natural environment (in Jakarta). He followed the development of his subject (Echa) from 0 - 5 years old in phonology, lexicon, morphology, syntax and pragmatics, using a descriptive approach similar to Brown (1973). The method of data collection was mostly natural: Echa was recorded while she played or talked with members of her extended family, although sometimes the researcher tried to elicit data by directing Echa to produce certain morphology or syntax using role-plays or conversation. Dardjowidjojo's study describes the whole range of Echa's language development, but I will concentrate here on those structures which are relevant to my own study.

Dardjowidjojo finds that, despite starting to talk somewhat later than English-speaking children, Echa acquires all the features investigated a few months earlier than her English speaking counterparts. For example, Echa acquires the definite markers *itu* 'that', *ini* 'this' and *-nya* 'the' at the age of one year and nine months, whereas the equivalent markers appear among her English speaking counterparts fifteen months later. This is a significant gap for children's language acquisition.

With regard to negation, Dardjowidjojo finds that Echa acquires *bukan* 'not' before *tidak* 'not' at the age of two years.[13] At this point in time, Echa can only produce "one word" negation, that is *bukan* or *tidak*. She begins to construct phrases using *tidak* + auxiliary + verb phrase at around the age of three years and seven months. The gap between the one word negation stage and using a complete phrase is thus quite substantial (nineteen months).

Dardjowidjojo claims that Echa was able to produce attributive adjectives in expressions such as *baju merah* 'red clothes', *singa jahat* 'bad lion' at the age of one year and ten months (Dardjowidjojo 2000: 214). I speculate, though, that these expressions may be copied from the characters in children's stories, such as 'Red Riding Hood' or 'The Lion King'. The main character in the former story is usually called *Si Baju Merah* 'Miss Red Clothes' in Indonesian, and the character Scar in 'The Lion King' is *singa jahat* 'bad lion'. It is possible that, at this point in time, Echa treats these words as unanalysed chunks, rather than using her own grammar to create a noun phrase that consists of a noun plus an adjective.

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[13] In general *bukan* 'not' is used to negate a nominal phrase predicate, whereas *tidak* 'not' is used to negate a verbal or adjectival phrase predicate. See Chapter Three for a more detailed description.

One of the difficulties with Dardjowidjojo's study is that he does not distinguish between the use of unanalysed chunks, or the experimental and readiness stages of his subject when he claims that Echa has acquired a structure. It is hard to assess Dardjowidjojo's claim of acquisition, because he does not state his acquisition criteria clearly, or present the frequency of occurrence when he claims acquisition has taken place.[14]

Despite this limitation, Dardjowidjojo has contributed to the research on language acquisition literature, in particular on Indonesian as a first language. He has enriched the language acquisition literature with a vivid and detailed record of a child's language development, describing the sound system, syntax and pragmatics issues.

1.4.2 Indonesian as a Second Language in a High School

A study of the effect of teaching on the acquisition of Indonesian as a second language by high school students was conducted by Gould (1998). This is a small-scale study (originally an assignment for Language in Service for Teachers), conducted over a period of four weeks and investigating a small number of structures. Gould investigated the acquisition of Indonesian word order by a group of twenty-six Australian year eight students in Canberra. Her research focused on the acquisition of the word order of Indonesian attributive adjectives and possessives; for example, *buku biru* 'blue book' and *buku saya* 'my book.' Prior to the commencement of the study, the students had received about 30 hours of instruction in Indonesian. The students were exposed to correct word order in teaching but no formal instruction was given.

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[14] After the publication of his study, Dardjowidjojo noted that his acquisition criteria were based on when Echa's syntax resembled the adult language and the meaning was understood by adult speakers of the target language (Dardjowidjojo 2000, personal communication).

At the end of four weeks of focused instruction, involving written and oral activities, Gould used two speaking activities in order to measure the extent of students' acquisition of possessive and adjectival word order. Gould does not specify her acquisition criteria, or provide any examples of the students' productions, although she states that 28% of the students were able to use the structures. It was not stated whether students showed evidence of the onset or emergence of the forms. Gould is more concerned with the students' accuracy in producing the desired form, rather than their acquisition of the structures. While it is understandable for a teacher to be concerned with her students' accuracy, this unfortunately does not necessarily provide an indication of the students' development.

Gould's conclusions from this study were that 72% of the students were not able to acquire Indonesian word order for predicative adjectives and possessives, so as to be able to produce them spontaneously in spoken form. Gould takes this to mean either that the input provided was not comprehensible for the students, or that she was expecting students to skip a stage in their acquisition of the language - which Pienemann (1981) states is not possible. Gould did anticipate that some students would not be ready to acquire Indonesian word order, but she was surprised by the large number of students who did not acquire it. As a result, she questioned whether the structure of the high school syllabus was in fact appropriate, or needed further study and revision.

Gould's study raises several questions about the relationship between teaching and language acquisition. I suggest that Gould is somewhat hasty in assuming that there is no evidence of acquisition: there is clearly development in the students' written language and, if it had been possible to measure the spoken language before the study, it is likely that there would have been evidence of development there as well. Furthermore, it is possible that the study was not conducted over a sufficient period. It would

certainly be interesting to see if acquisition followed among more of the students after the study concluded.

1.4.3 Indonesian as a Second Language at Tertiary Level

Adnan's studies (1994, 1998) were aimed at discovering the developmental stages of acquisition for Indonesian SLA, basing his analysis on the Multi-Dimensional Model (Clahsen 1980; Meisel, Clahsen and Pienemann 1981; Clahsen, Meisel and Pienemann 1983). His second (1998) study was a cross-sectional study of the acquisition of Indonesian by Western Australian university students. The 30 informants for the cross-sectional study were selected randomly. Data were elicited by means of asking students to describe pictures and tell free stories. The samples were then categorised according to morphological and syntactic development. Adnan then compared these results with his previous study (1994), a longitudinal study of one subject, a student from the Royal Australian Air Force (RAAF) School of Languages in Victoria, who was interviewed twice a month for a period of nine months.

This earlier study (Adnan 1994), using longitudinal data to investigate the acquisition of Indonesian negation as L2, can be compared to my own study.[15] However, Adnan does not present his results in detail; his report of the study presents his conclusions briefly, with little supporting evidence.

Adnan finds that Indonesian negation was acquired in the following sequence (1994: 4, translation and subscript '$_{\text{PRED}}$' added):

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[15] Adnan also studied the acquisition of interrogatives, but I will not discuss this here.

1. *tidak* + VP_{PRED}	*tidak tahu*	'not know'
2. *tidak* + AP_{PRED}	*tidak sakit*	'not sick'
3. *belum* + VP_{PRED}	*belum tahu*	'have not known yet'
4. *kurang* + VP_{PRED}	*kurang tahu*	'do not know enough'
5. *tidak begitu* + VP_{PRED}	*tidak begitu kenal*	'do not know well'
6. *tidak begitu* + AP_{PRED}	*tidak begitu pandai*	'not very clever'

Adnan states that nominal negation using *bukan* + NP_{PRED} was not acquired at all, though the student did produce some examples, albeit never confidently. This seems to contradict Adnan's conclusion in his later study (1998:29) that the acquisition of the general negator *tidak* 'not' is not a prerequisite for the acquisition of the nominal negator *bukan* 'not.' In contrast, Dardjowidjojo (2000:132-133) found that his L1 subject acquired *bukan* 'not' before *tidak* 'not' at two years of age. It is possible that both claims are valid, since the studies involved different age groups as well as a different language environment (L2 as opposed to L1).

In his cross-sectional study, Adnan (1998) attempts to investigate the acquisition of a morphology and syntax of the TL. Because he tries to investigate a large number of structures, the treatment of individual structures within his report is quite cursory. For example, the results for negation are presented in a single paragraph: he states that most of the respondents did not acquire *bukan*, but does not compare this to the acquisition of *tidak* (Adnan 1998:30).

In summary, the published Indonesian SLA studies to date appear to be preliminary studies; and further studies are needed before a clear picture emerges. Data can be difficult to interpret, in particular when the acquisition criteria are unclear or not stated; and, without access to the data on which the claims are based, it is hard to evaluate claims of acquisition.

1.5 Summary and Purpose of this Study

The aim of the above discussion of influential SLA research over the past three decades has been to provide a background to my own study, the main body of which, Chapters Four and Five, describes how the learners' interlanguage (IL)[16] develops through a number of stages as they become more confident with communicating in Indonesian.

The work of Corder (1967, 1971), Selinker (1972) and Nemser (1971a, 1971b) provides the groundwork for the concept of interlanguage and thus underpins the interpretation of learners' IL in my own study. Subsequent studies have built on their work, observing that the acquisition of a second language follows a predictable path, and that the path of acquisition depends on the second language itself rather than the learners' first language background. More recently, some attempts have been made to provide explanations for the observed sequences of development within a predictive framework. The Multi-Dimensional Model and Pienemann's Processability Theory are both able to produce predictions about the sequence of acquisition - predictions which can then be tested.

The empirical studies undertaken by Dardjowidjojo (2000), Gould (1998), Adnan (1994, 1998) provide a background for the present study, which investigates Indonesian language acquisition by adult learners. Dardjowidjojo's (2000) detailed study of the acquisition of Indonesian as a first language covers, among others, the same structures that are examined in this thesis; and it is worthwhile to compare the order of his child subject's acquisition with that of the adults in my study.

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[16] The term 'interlanguage' in this study is used as a general term to describe the learners developing language, and will be defined in Chapter Two.

Gould's (1998) study of the acquisition of Indonesian word order was a cross-sectional study, covering a very limited period of development. Her study looks at the acquisition of the word order for Indonesian attributive adjectives. My examination of the acquisition of adjectives in Chapter Five concentrates on the distinction between predicative and attributive adjectives. Nevertheless, Gould's study is important because an understanding of Indonesian word order is an essential part of acquiring the attributive adjective.

Adnan's (1994) study is similar to my own, because it investigates second language acquisition of the structures of negation by an adult learner. However, his longitudinal study looks only at the point of acquisition of the negation structures, and he does not describe the development of the learners' IL leading up to acquisition. His acquisition criteria are unclear, and he does not present his results in detail, so it is difficult to make an assessment of his results.

The detailed analysis of learners' development presented in my study aims to provide a clearer picture of how the IL develops over time. As will be seen in Chapter Four, this description is especially significant with regard to the acquisition of *bukan* 'not', used for the negation of noun phrase predicates, because it will reveal a much more complex pattern of development than Adnan's study.

None of the three studies of Indonesian described above provides a description of the input received by the learners, in order to compare this with the sequence of acquisition. This comparison is necessary in order to determine whether learners are using formulaic language, that is, language learned as chunks from class or textbooks, rather than language representing actual acquisition. In my own study I include, where relevant, a detailed comparison of the forms produced with the input received. I also

incorporate a requirement for the learners to use a variety of different vocabulary in order to demonstrate the acquisition of a structure.

In Chapter Six, I will make a comparison between the sequence and timing of the the learners' acquisition with the sequence and timing of the input received. The comparison will have a practical motive, rather than a theoretical one: I will suggest an order, which may be more effective, for the formal instruction of the structures examined in this study. The question of whether formal instruction aids in the acquisition of a second language is not examined in detail; however, the comparison of the timing of acquisition to the timing of input received can be related in general terms to the Teachability Hypothesis, in demonstrating that instruction does not hasten the acquisition of structures for which learners are not developmentally ready.

My study contributes to the field of SLA principally by providing a detailed examination of the whole process of development, including the acquisition, of the syntax of negation syntax and of predicative and attributive adjectives in Indonesian. The acquisition and development of adjective syntax has not been covered in any of the previous longitudinal studies of L2 Indonesian, so my study pioneers this aspect of Indonesian SLA research. My study also extends previous research into the acquisition of L2 Indonesian negation syntax. An important feature of the analysis of both negation and adjectival syntax is the description of the process of development, which includes comparisons of the IL with the input received. This analysis has not been undertaken in any of the previous L2 studies of Indonesian. I consider that the structures I shall investigate and the methodology used in my study will make a valuable contribution to the understanding of Indonesian second language acquisition.

1.6 Conclusion

This chapter has described the development of second language acquisition theories, as well as studies of language acquisition which are related to my own study. It has also described the small body of literature on the acquisition of Indonesian, as a first or second language. Following from the description of these studies, the contribution of the present study to the study of Indonesian SLA has been outlined.

The next chapter will describe the methods used to collect and analyse the data used in my study. It will also define the terms used in the analysis of the learners' IL in later chapters.

CHAPTER TWO

METHODOLOGY AND DATA INTERPRETATION

2.1 Introduction

In this chapter, I will describe the methods used to conduct my study. This will include the selection of the learners and a description of how the data were collected, transcribed and analysed. I will then discuss the criteria used for determining the acquisition of the structures under investigation, as well as the criteria used to distinguish between production, acquisition, onset and development.

2.2 The Study

The study was designed as a longitudinal study of the acquisition of Indonesian syntax among beginner students at tertiary level. The focus is firstly on the acquisition of the syntax of negation, and secondly on the acquisition of predicative and attributive adjectives. I chose to use mostly unstructured and semi-structured interview formats, collecting data over a period of 68 weeks. In an unstructured interview, the interviewer exercises little or no control, whereas in a semi-structured interview the interviewer directs the topic of the interview, but does not use a set of predetermined questions (see Nunan 1992:149).

2.2.1 Reasons for Using Longitudinal Data

The advantage of using longitudinal data is that it allows observations of the acquisition sequence for individual learners to be made at frequent intervals over a period of time. Such data allow accurate analysis of the timing of

acquisition and makes possible an examination of the development of the learners' language both before and after acquisition. I elected to use longitudinal data, collected from the very beginning of instruction, because this would allow me to document the early development of the learners' structures and to compare this with the input received: in some cases, the structures may be acquired quite rapidly.

An alternative to a longitudinal study would be to use cross-sectional data, collected at a smaller number of discrete points. Cross-sectional data can be collected from a greater number of learners at a particular point and as a result allows detailed statistical analysis to be performed. However, cross-sectional data may not be as sensitive to the timing of acquisition, because the learners' accuracy for different structures at a particular point may not necessarily equate to the order of acquisition. To take an example from my own data, in the week 15 interviews, the accuracy rate for adjectival negation was 100% for all three learners, whereas their accuracy rate for verbal negation was between 78% and 96% (see Chapter Four). In a cross-sectional study, this would be taken as evidence that adjectival negation is acquired before verbal negation, but in fact my longitudinal analysis shows that verbal negation is acquired first.

2.2.2 Reasons for Using Interviews

Ideally, to gain an unbiased picture of natural spoken language, data would be collected from language spoken in everyday use. However, in a foreign language setting, unstructured and semi-structured interviews provide a practical alternative.

Interviews are a commonly used method of data collection for studies of spoken language, being frequently used in applied linguistics, by second language acquisition researchers interested in collecting data for stages and

process of acquisition, and for assessing language proficiency (cf Ingram 1984; Pienemann and Johnston 1987; Nunan 1992). Interviews offer a means of gathering oral data, which, although not completely naturalistic, is practical, inexpensive and easy to conduct. For these reasons, I decided to use interviews as the means of collecting data.

2.2.3 Background of the Learners

At the start of the course, students from the first year beginning Indonesian course at the Australian National University (ANU) were asked to participate in the study on a voluntary basis.[1] Initially, nine students of English-speaking background volunteered for the study: two males and seven females, ranging in age from 19 to 46 years. All except one were undergraduate students.[2] By the middle of the second term, there were still three learners whom I could interview regularly. I have based my analysis on the data collected from these three students, one male and two female, to whom I will refer by the pseudonyms Matt, Jane and Kate. All were mature age students.

The first student, Matt, age 46, is a part-time undergraduate. He is a public servant and has lived in Malaysia and Nigeria on short postings. Although he lived abroad, he could barely converse in the local languages of the countries, because he mostly used English as the daily and official medium. Approximately eight months before joining the first year of formal study in the University, he took a vocational course in Indonesian for six weeks, with four hours of instruction per week.

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[1] Participation in the study offered the advantage of extra practice in Indonesian for the students.

[2] The proficiency of individual students was not known and no tests were given prior to the commencement of the study.

The second student, Jane, age 36, is a part-time undergraduate and a housewife with children. Jane learned two foreign languages prior to studying Indonesian. She had studied two years of Japanese at university; and, having lived in Holland for at least one year, speaks Dutch well enough to get around in the country. She had no prior exposure to Indonesian before enrolling in the course.

The third student, Kate, age 34, is a full-time postgraduate and a housewife with children. Her first degree was a secondary teaching degree. She lived in Germany for at least a year and can speak German at the survival skills level. She normally used English as the daily medium at home and with her friends while she was in Germany. She had no contact with or prior knowledge of Indonesian before she enrolled in the course.

2.2.4 The Indonesian Course

The students were enrolled in a beginning Indonesian course, for which I was the lecturer and convenor. The students had a one hour Indonesian grammar lecture and four hours of tutorials per week. The grammar lecture was mainly in English, with some Indonesian gradually introduced. I led the first two hours of tutorials, with the other two hours led by other tutors, all of whom were experienced in teaching Indonesian to non-native speakers of Indonesian.

Bahasa Indonesia Langkah Baru, Book I (Y. Johns 1989, first published in 1977) was the only textbook used in the course. This is a traditional, grammar-focused textbook, using an audio-lingual aural-oral approach. Johns introduces each new structure with a brief explanation, then provides a number of sentence patterns to use for speaking practice and for substitution drills. The negation and adjectival syntax which I will examine were taught using sentence pattern models, and then reinforced through

oral classroom drills. After that, they were used in reading texts, and discussed again in class if necessary. The tutorial activities were set in the course outline each semester (see appendix A). Some activities were audio-lingual grammatical drills (listening to the tapes and copying the sentence practice exercise), although there were some communicative activities including free role-plays which were decided by the tutors.

2.3 Method of the Study

Interview sessions were scheduled weekly (even during the mid semester breaks and the summer break). This was modified from time to time due to work, study and family commitments, which took precedence. The following sections describe the method of conducting the interviews and the materials used.

2.3.1 Equipment and Materials Used

A tape recorder with a floor microphone was used for recording the interview sessions. This enabled me to record the data from the learners without the need to write notes. I believe this method was less intrusive, because the learners were not distracted by note taking. It also allowed the data to be reviewed and transcribed at a later time, ensuring that the transcription of the data was correct and more detailed than would have been possible with manual note-taking.

2.3.2 The Interviews

Most of the interview sessions were semi-structured. From week one to week four, however, the interviews were structured "question and answer" sessions, with the learners responding to questions posed by the interviewer. At this stage the learners had limited exposure to and knowledge of the

target language, so that unstructured interviews were not practical. Later, the learners were able to speak freely, and thus produce examples of spoken language which would be as close as possible to natural language.

From week four onwards the interviews started to gain shape as the learners became more confident with their language ability: not only were the students answering questions, but they were able to conduct role plays among themselves on various topics, as well as participate in free discussions on topics of interest to them (see Appendix C). Jane and Kate's interview sessions often consisted of a conversation between the two of them, whereas Matt did not have a regular partner for the whole period of data collection, so some of his sessions were conducted by me or another interviewer.

The atmosphere of the interviews became progressively more relaxed, and the interview sessions became longer. The recording sessions, which initially lasted for five minutes in week one, gradually extended to about forty-five minutes by week twenty-one. By this time the learners were already in the second semester of their first year studying Indonesian language; they had had the opportunity to practise more, especially after revising for their oral and written examinations, increasing their vocabulary and grammatical skills.

Some teaching materials were used in the interview sessions to assist with data elicitation; however, I tried to use materials that were open-ended, so that students would be able to continue their discussions without being overly constrained as to the topics of conversation or the structures they used in the target language (TL). The material included sets of pictures developed by the Language Acquisition Research Centre in Sydney (LARC) (University of Sydney 1994, Australia). There are normally four pictures in each set, with themes such as recipe sequence, police officer, picnic sequence - providing the learners with visual cues to assist with their constructions

(see Appendix B). I also developed role-play activities to be used by the learners in some of the later interviews.

When the assigned topics were too hard to talk about or to debate, the students were free to choose their own topic, and also free to choose their own roles in their desired topic. Normally, the learners continued to discuss the given topic and then, if they still wanted to continue the session, they chose their own topic, which usually related to studies, family matters, or work related matters. One of the learners, Matt, could talk on a wide range of topics, including international and local politics, besides family life and study matters.

2.4. Method of Data Analysis

All the interview sessions were transcribed and analysed according to the structures used.[3] From the 68 weeks of interview data, I collected approximately 50 hours of recorded data, of which about one-third was used as the basis for this thesis. The transcripts comprised approximately 500 pages for Matt, and 500 pages for Jane and Kate, who were normally partners in their sessions.

There were times when insufficient data were collected - it was not always possible to guarantee sufficient examples of the structures under investigation from the unstructured and semi-structured interview settings. If the data had been more actively elicited, this may have provided more data; however, this would not have been natural language, and it is quite possible that bias would have been introduced into the data.

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[3] The corpus of the data is large, and includes data on structures that are not examined in this thesis. This means that there is a large amount of data which can be used as the basis for future studies.

2.4.1 Data Transcription

The tapes containing the interview data from the three learners were transcribed by an Indonesian native speaker (not one of the Indonesian language tutors) using a transcription machine which enables the tapes to be reviewed easily as they are transcribed. The transcriptions were stored on disks; and I then checked the transcriptions against the tapes. This helped to reduce any bias in my interpretations of the learners' production, as I was also the teacher of the course.

After the data were transcribed, the transcripts to be used for analysis were selected. Due to the limited time frame available for completion of this study, it was necessary to limit the transcripts selected for analysis. Analysis of the data from every third or fourth week provided sufficient monitoring of the learners' syntactic development for the purposes of this study. In some cases, it was not possible to use data from the third or fourth week, because the learner was not able to attend that session. In these cases, I used the closest possible weeks for the analysis. For instance, after week 45, data should have been analysed for week 48, but in this week the session did not take place, so week 51 was analysed. In all, the transcripts for 23 weeks were analysed.

2.4.2 Data Analysis

The 23 transcripts were analysed manually according to the following categories:[4]

1) noun phrases
2) positive sentences
3) negative sentences

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[4] Categories 4, 5 and 6 are not going to be presented in this study.

4) interrogative sentences
5) passive sentences
6) morphology: transitive and intransitive verbs

The positive and negative sentences were then subcategorised according to the three predicate categories, that is $VP_{PREDICATE}$, $AP_{PREDICATE}$, and $NP_{PREDICATE}$. In order to investigate the acquisition of the syntax of negation, all of the data for negative sentences were used. For the positive sentences, only those sentences in which the adjective functions as predicate were selected, in order to investigate the predicative adjective acquisition.

The noun phrases were divided into subcategories such as noun plus possessor, noun plus demonstrative pronoun, and noun plus adjective. Because the acquisition of attributive adjectives was being investigated, particular attention was paid to the noun plus adjective subcategory, where the adjective functions as a modifier to the noun.

When the transcribed data had been manually analysed, the results were entered into a database using Excel® version 5. The complete database comprised a total of 350 pages.

The large amount of data collected over many sessions included a great deal of additional data on other structures, and therefore the transcription and analysis of the data was a major task. However, the methods used enabled the body of data to be organised and analysed effectively. The data give a clear picture of the learners' acquisition and the development stages of the structures studied.

2.5 Terminology Used

The terms 'production', 'aquisition', 'onset' and 'development' need to be defined, since these terms will be used in Chapters Four and Five to describe aspects of the learners' changing language. Other terms used in particular ways in this thesis will also be explained below.

2.5.1 Production

In this study, I differentiate between the learners' production and their acquisition of the target language, because it is possible for the learners to produce certain elements and structures of the target language, without necessarily being able to apply the underlying rules appropriately in their spoken language. 'Production' refers to the use of any elements of the language; this may include elements that have not been analysed, such as learned elements or formulaic language, or repetition of phrases copied from the interviewer.

I use the term 'acquisition' (also see 2.5.2 below) to refer to the first systematic use of a structure in a learner's IL; that is, the learner is able to apply the rules that govern the use of the structure in the target language. Because it is not always obvious whether a structure can be regarded as acquired - a learner may have obtained some phrases from class or texts, which they can use correctly but without necessarily being able to apply the rules governing the use of the structure in different contexts - it is necessary to have clear acquisition criteria: these criteria will be described in the next section.

2.5.2 Acquisition Criteria

In this study, the following criteria were adopted for assessing whether or not a structure has been acquired:

i) production must be spontaneous; that is, not prompted by the interviewer or conversation partner;
ii) the structure must be used in the correct syntactic context;
iii) the learner should not be using 'repertoire'; that is, reproducing phrases drilled in class or textbooks;
iv) the learner must use the structure with at least 3 different lexical items;
v) the learner must demonstrate correct application of the rule in at least 2 occurrences in 3 or more contexts.[5]

In developing these guidelines, I have had regard for the rules used by other researchers for determining acquisition. There appears not to be an accepted objective standard number of occurrences for judging whether a structure can be considered acquired. Different researchers use different numbers of occurrences or sometimes percentages as an appropriate measure, according to their own judgement. Some researchers use an accuracy criterion to determine acquisition; for example, Brown (1973) uses a 90% level of accuracy, sustained over three interviews, to indicate acquisition in L1.

Other studies use an 'emergence criterion' to describe acquisition. The emergence criterion, first proposed by Meisel, Clahsen and Pienemann (1981) as part of the Multi-Dimensional Model, defines acquisition as "the first appearance of a form in an IL" (Larsen-Freeman and Long 1991:283). When using an emergence criterion, there is no fixed rule for the exact number of occurrences and contexts required to determine acquisition. For

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[5] Note that this does not correspond to a 67% accuracy level. For example, 2 correct rule applications out of 4 contexts still counts as acquisition.

example, Huter's (1998) study of Japanese second language acquisition at tertiary level uses 2 out of 3 appropriate rule applications to be considered acquired. Other studies use different criteria: Johnston (1997) uses 3 out of 4 occurrences as evidence of acquisition; Pienemann (1998) uses 3 out of 5, and Zhang (2001) uses 2 out of 4. Indeed, Håkansson (2000, personal communication), considers that in morphology one occurrence can be categorised as acquired if the learner can contrast two different rule applications at a single interview. For example, if a learner of English can say *'He goes to school'*, and on another occasion at the same interview he or she can say *'They go to school'*, it means that the learner's usage of the morpheme *-es* in 'goes' is likely to be an analysed utterance. The learner is able to distinguish the third person, singular, present markers in his or her interlanguage grammar from the third person, plural, present markers. While the measure of acquisition, using the emergence criterion, may vary from researcher to researcher, they are consistent in accepting that acquisition of a rule represents the point at which a learner is able to use the rule productively in normal speech. It does not necessarily imply that the learner will be approaching native speaker norms, nor does it imply the absence of errors.

I decided to follow Huter's (1998) study by using the criterion for acquisition that learners must be able to apply the correct rule in at least 2 occurrences in 3 or more contexts. Huter used elicited data to obtain samples of certain syntax of the target language; whereas my study uses semi-structured interviews to produce more natural speech data. However, I found that this criterion was appropriate for my data, allowing me to determine whether there is sufficient evidence that structures are used regularly in the learners' IL and, therefore, that the structures are analysed. The test of whether my criteria are appropriate is, of course, whether the learners were able to continue to use structures in the period after acquisition: that is, that in general they do not appear to lose the use of an acquired structure. This does not mean that their performance should be completely "error free"; I accept

that there is the possibility of some errors. The learners should, though, be able to use the structures regularly. In general, I found that the criteria worked well. There were a few apparent exceptions, which I will discuss further in Chapters Four and Five, but some of these may have indicated a further development in the learner's IL rather than the loss of the acquired structure. In adopting my acquisition criteria, I try to ensure that the criteria are not so restrictive that they mask the development of the learners' IL.

I also adopted the technique of analysing the learners' oral production data against the formal input from textbooks and class; this, I believe helps to remove possible bias in circumstances where learners may be using formulaic language. It is possible that the learners' oral production is structurally correct, but, when checked against the formal input, it can be seen that they are simply copying the structure from the textbook by substituting one element of a sentence with another element from the same grammatical category (for example, substituting a proper name for a subject pronoun). In such cases, this would not be called acquisition, because the sentence is a result of a learned formula, rather than an utterance constructed from the learner's own language resources. I do not deny that formulaic language is a part of the development process; my aim, however, is to identify when a structure becomes established in the learner's IL, so that it can be used productively.

2.5.3 Onset

The acquisition criteria described above provide a means of assessing whether a structure has become established as part of a learner's IL. There is often a stage in the learners' development when they have not yet fulfilled the acquisition criteria, although they seem to be beginning to incorporate the structure into their interlanguage. I use the term 'onset' to describe this phenomenon. Thus, 'onset' can be seen as representing the stage where

there is insufficient evidence of rule application to consider a structure acquired (cf Pienemann 1998:145-147).

It can be difficult to determine at what point learners are beginning to use structures as an analysed part of their interlanguage. Several indicators have been used to decide when the onset of a structure has occurred. Firstly, if the structure is sustained over time; for example, a structure appears once in two or three consecutive interviews and it appears that these are not cases of formulaic language. Another indicator is if the learner starts to use self-correction; that is, he or she starts to produce an incorrect phrase, but then corrects the utterance without prompting. Finally, I adopt the same requirements of spontaneity and appropriate context that are used for assessing acquisition.

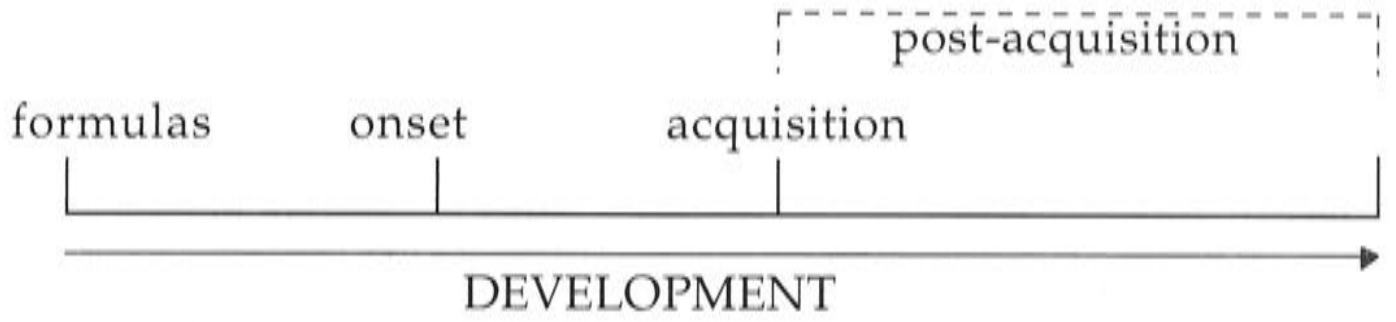
2.5.4 Development

It is important to note that I make a distinction between the learners' acquisition and the development path they follow to acquisition. In my study, I will describe the learners' route to acquisition of negation and adjectival structures in Indonesian, as well as continuing development of their language after acquisition. In describing the route to acquisition, I will look at all the language forms produced by the learners. For example, in the early stages of development, learners may not produce many examples of a structure, and these may consist of repertoire learned in class, but these can still be counted as valid evidence of development.

Development, then, refers to the process of gradual change that occurs in the learners' IL production throughout the study. In contrast, 'onset' and 'acquisition' describe events that occur during the process of development, and the two terms refer to the learners' ability to apply the rules governing

the use of a structure. The diagram below (Diagram 2.1) shows the relationship between development, onset and acquisition.

Diagram 2.1: Development Stages



The above diagram shows that development is a process that continues both before and after acquisition, whereas onset and acquisition are events that occur during this process. I regard the point of acquisition and the process of development as two aspects of the process by which the structures studied are learned: both aspects complement each other as ways of describing the learning process.

2.5.5 Other Terms

At this point, it is essential to define the terms 'interlanguage', 'stage' and 'error' as used in this thesis. The terms 'repertoire', 'formula', 'stock phrase' and '(unanalysed) chunk', which I will use in describing the development of the learners' language, also need to be defined.

In this thesis, the term 'interlanguage' is used in a general sense to describe the "learner's developing second language knowledge" (Lightbown and Spada 1999: 176). The interlanguage is systematic, but also dynamic; my emphasis is on describing the changes in the language forms produced by learners, and to determine the point of acquisition of each structure.

In this thesis, the term 'stage' is used to describe the changes in the learners' production of a particular structure - the stages may include the use of formulas, the onset and acquisition of a structure, as well as possible development after acquisition. This differs from the meaning of the term 'stage' as used by Pienemann (1998) in his Processability Theory. The stages of development outlined in Processability Theory are used to describe and predict the order of acquisition of different structures in the TL.

The term 'error' is used to describe any of the learners' production which does not conform to the TL grammar. I adopt the term 'error' in a similar sense to Richards' (1971) use of "intralingual error" and "developmental error." He suggests that "intralingual errors" result from faulty or partial learning of the TL, and "developmental errors" result from the normal pattern of language learners' development (see Richards 1971; Richards, Platt and Webber 1987). In other words, errors reflect the state of development of the learners' language. However, I do not make a distinction between "errors" and "mistakes" as suggested by Corder (1967).[6]

The terms 'repertoire', 'formula', 'stock phrase', and '(unanalysed) chunk' are used interchangeably. I use these terms to describe phrases that are likely to have been learned, either in class or from the textbook, as a single lexical element, or monomorphemic chunk. In Chapters Four and Five, I will analyse the relevant input to assist in determining whether a particular phrase should be classed as repertoire.

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[6] Corder (1967) suggests that "errors" reflect the learners' competence and can be systematic, whereas "mistakes" indicate the learners' performance and can result from slips of the tongue or fatigue.

2.6 Conclusion

In this chapter, I have described the methods used to collect and analyse the data for this study. The interview process was designed to produce data that would be as close as possible to natural speech, by using mainly unstructured or semi-structured interviews.

The study uses longitudinal data, because this is appropriate to my analysis of the early stages of language development. Longitudinal data allows the gradual development of the learners' IL production to be charted in detail over the course of the study: a process of development which will be described in Chapters Four and Five.

In this study, the term 'development' is used to describe the changes that occur in the learners' IL over the course of the study, including the use of 'formulas' in the early stages. The term 'acquisition' refers to the point at which a structure becomes incorporated in the learner's IL. The term 'onset' is used to describe circumstances where there is insufficient evidence for acquisition, but it appears that learners are progressing from using formulas to using analysed language.

Chapter Three provides an outline of Indonesian grammar for those unfamiliar with the language, concentrating on the structures which are analysed in this study.

CHAPTER THREE

BASIC INDONESIAN GRAMMAR

3.1 Introduction

This chapter presents an outline of Indonesian grammar for the benefit of readers who are not familiar with the language. The order of presentation is as follows: firstly, Indonesian grammar in general will be discussed; secondly, the syntax of negation; thirdly, the syntax of adjectives.

The presentation concentrates on the syntax of negation and syntax of adjectives, both of which are being investigated in this study. The discussion will be confined to surface structure; possible differences between deep and surface structure will not be considered. For practical reasons, the structures will sometimes be represented according to the linear order of the units, ignoring the elaborative hierarchical phrase structure rules.

3.2 Noun, Verb and Adjective Phrases

Indonesian generally places the head noun first in a noun phrase. A noun can be modified by an adjective, a pronoun or possessive, and followed by a demonstrative (Triwinarti 1995:21). The exception is the quantifier, which usually precedes the noun and can be followed by an optional classifier. Nouns are not marked for number, gender, or definiteness. Plurality can be shown by full reduplication e.g. *mobil-mobil* 'cars', and definiteness can be shown by deictic *itu* 'the, that' or a personal pronoun *-nya* 'his, her, its, their.'[1] (cf Prentice 1990:200-201).

[1] For a complete discussion of deictics in Indonesian see Kaswanti Purwo (1984).

The following structure (1) shows the possible noun modifier order (adapted from Triwinarti 1995:21):

(1)

(QTF)	(CLASS)	N	(A)	(POSSP)		(DET)
lima	ekor	ayam	besar	ibu	saya	itu
five	CLASS	chicken	big	mother	1Psg	DET

'the five big chickens of my mother'

Verbs are not marked for person, gender, number, or tense. If an auxiliary (2) or an aspect marker (3) is present, it precedes the main verb.

(2)

Kami	*akan*	membaca	buku	itu	besok.
1Ppl-EXCL	will	read	book	DET	tomorrow

'We will read the book tomorrow.'

(3)

Dia	*sedang*	membaca	buku	baru.
3Psg	PROG	read	book	new

'He is reading a new book.'

Adjectives[2] are not marked for number, gender, or definiteness. However, in some contexts predicative adjectives can be fully reduplicated to show plurality of the noun phrase subject, for example:

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[2] In this thesis I adopt the definition of an adjective by Sneddon (1996): "an adjective is a word which describes a noun; it tells something about a person or thing, such as its shape or size" (Sneddon 1996:175). One of the common tests for an adjective in Indonesian is whether it can be modified by an intensifying phrasal adverb such as *sangat* or *sekali* 'very', e.g. *sangat cantik* 'very beautiful'. Verbs do not typically take this phrasal adverb, e.g. **sangat makan* '*very eat'. It should be noted that certain adjectives cannot co-occur with this phrasal adverb (Kaswanti Purwo, personal communication), e.g. *sangat mati* 'very dead,' and *hidup sekali* 'very alive'. The unacceptability of these constructions appears to be determined by the types of adjectives, e.g. gradable vs non-gradable types. Discussing different types of adjectives and the constraints on their co-occurrence is beyond the scope of this study.

(4) Mobil-mu *bagus-bagus*.
car -POSS good good
'Your cars are good.'

In Indonesian, like in English, one can combine two adjectives using a conjunction *dan* 'and' or *tetapi* 'but' (5).

(5) Gadis itu cantik *tetapi* bodoh.
girl the pretty but stupid
'The girl is pretty *but* stupid.'

3. 3 Word Order and Syntax

By and large Indonesian is a Subject-Verb-Object (SVO) language. The word order is relatively rigid; such a language is called a configurational language (Crystal 1997:80). In this type of language, word order is crucial for grammatical relations. This is illustrated by the contrast in the following examples.

(6) *Sean* memukul Kate.
Sean hit Kate
'*Sean* hit Kate.'

(7) Kate memukul *Sean*.
Kate hit Sean
'Kate hit *Sean*.'

Sentence (6) shows that *Sean* comes before the verb, and is understood as the subject (the actor), whereas in (7) *Sean* is the object (the patient).

The following is a brief description of Indonesian syntax.[3] The basic clause structure in Indonesian can be captured by the phrase structure rule shown in (8a). The rule states that a sentence (=S) (or clause), consists of a noun phrase (NP) followed by a phrase of any category (XP). To highlight the idea that the NP is the subject and the XP is the predicate, the two units are marked with subscripts SUBJ and PRED respectively as shown in (8b):

(8) a. S -----> NP XP (where X can be any variant of VP/AP/NP/ PP)

(8) b. S -----> NP_{SUBJ} XP_{PRED}

The following examples (9 - 12) show that 'X' can be realised by different categories:

(9) a. Dia jatuh. (NP_{SUBJ} VP_{PRED})
3Psg fall
'He falls.'

(9) b. Dia berdiri.
3Psg stand
'He stands up.'

(9) c. Dia makan nasi.
3Psg eat rice
'He eats rice.'

(9) d. Dia memandi-kan anjing-nya.
3Psg bath -CAUS dog -POSS
'He baths his dog.'

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[3] Drawn from Arka (1993) with some modification of the examples.

(9) e. Dia memagar-i halaman-nya.
3Psg fence -LOC yard -POSS
'He fences his yard.'

(10) Saya gembira sekali. (NP_{SUBJ} AP_{PRED})
1Psg happy very
'I am very happy.'

(11) Saya guru. (NP_{SUBJ} NP_{PRED})
1Psg teacher
'I am a teacher.'

(12) Mobil-nya di halaman. (NP_{SUBJ} PP_{PRED})
car-POSS in yard
'His car is in the yard.'

An important point illustrated by examples (10) - (12) is that Indonesian, unlike English, does not always employ a verb as a predicate. The predicate in Indonesian can be an adjectival, nominal or prepositional phrase.

A clause can appear with an auxiliary, positioned before the verb:

(13) Mereka *akan* datang.
3Ppl will come
'They will come.'

Taking the auxiliary into account (and ignoring the structural status of the auxiliary for the moment - this will be discussed in 3.4.1) the phrase structure rule in (8) can be reformulated as:

(14) S ---> NP_{SUBJ} aux XP_{PRED}

The verb phrase with an adjunct (adverb) needs special treatment. Recall that Indonesian is a SVO language where in the active sentence structure, the NP_{SUBJ} is preverbal and NP_{OBJ} is postverbal. Nothing can be inserted between the verb and the postverbal NP_{OBJ}. This is shown in the contrast between (15), which is acceptable, and (16), which is not acceptable.

(15) Dia membaca buku *kemarin.*
3Psg read book *yesterday*
'He read a book *yesterday.*'

(16) *Dia membaca *kemarin* buku.
3Psg read *yesterday* book
'He read *yesterday* a book.'

The fact that nothing can be inserted has been taken as strong evidence for the existence of a surface VP in Indonesian.[4]

The other point to note is that when there are two objects, the order of the two objects is also rigid. For example, the object showing the beneficiary role must precede the object showing the theme, as in (17), otherwise the sentence is unacceptable as in (18).

(17) Dia membuat-kan Tina *kue.*
3Psg make-BEN Tina *cake*
SUBJ OBJ_{BEN} OBJ_{THEME}
'He made Tina a cake.'

[4] Other evidence such as coordination and ellipsis in support of the VP analysis in Indonesian is discussed in Arka (1993).

(18) *Dia membuat-kan *kue* Tina.
3Psg make-BEN OBJ_{THEME} OBJ_{BEN}
*He made a cake Tina.'

Interrogatives in Yes/No questions and Wh-questions are normally placed at the beginning of the sentence as illustrated in (19a) and (19b).

(19) a. *Apa-(kah)* dia sudah sembuh?
Q-marker 3Psg already recover
'Is he already recovered?'

(19) b. *Mengapa* dia membuat-kan Tina *kue*?
Wh-Q 3Psg make-BEN Tina *cake*
SUBJ OBJ_{THEME} OBJ_{BEN}
'Why did he make Tina a cake?'

Sentence adverbs[5] can be positioned at the beginning (20a) or at the end of the sentence (20b), and in some circumstances they can also be positioned after the NP_{SUBJ} (20c).

(20) a. *Kemarin* dia datang.
yesterday 3Psg come
'Yesterday he came.'

(20) b. Dia datang *kemarin*.
3Psg come yesterday
'He came yesterday.'

[5] Sentence adverbs modify the whole clause and their positions are varied (cf. phrasal adverb in 3.5.1.2).

(20) c. Dia *kemarin* datang.
3Psg yesterday come
'He came yesterday.'

A compound sentence may be formed from two simple clauses with the conjunctions *dan* 'and', *tetapi* ' but', or *atau* 'or'. Sentence (23) shows how sentences (21) and (22) can be merged.

(21) Ann cantik.
Ann pretty
'Ann is pretty.'

(22) Ann pandai.
Ann clever
'Ann is smart.'

(23) Ann cantik *dan* pandai.
Ann pretty and clever
'Ann is pretty and clever.'

In the complex sentence, the subordinate clause is dependent on the main clause. *Apakah* 'whether', *bila* 'when', *kapan* 'when', *kalau* 'if', *jika* 'if', and *sambil* 'while' are commonly used to mark subordinate clauses as in (24-25).

(24) Saya tidak tahu *apakah* dia akan datang.
1Psg not know whether 3Psg will come
'I do not know *whether* he will come.'

(25) *Kalau* saya kaya, saya akan membeli mobil baru.
if 1Psg rich 1Psg will buy car new
'*If* I were rich, I would buy a new car.'

3.4 The Syntax of Negation

Very few detailed studies have been carried out on the syntax of Indonesian negation. The following section will present a brief overview of the syntax of Indonesian negation, and describe the model used in this study.

3.4.1 Linear Order and X-bar Syntax: A Brief Overview

In describing the syntax of negation, I will adopt a version of the X-bar method (where applicable) (cf Haegeman and Guéron 1999; Baker 1995; Horrocks 1987; Sells 1985; Radford 1992). A phrase in X-bar can have internal units consisting of different levels: a maximal level (i.e. XP), an intermediate level (X′, or X-bar), and a zero-level (X). An adjective phrase (AP), for instance, can internally have A′ (A-bar) and A levels:

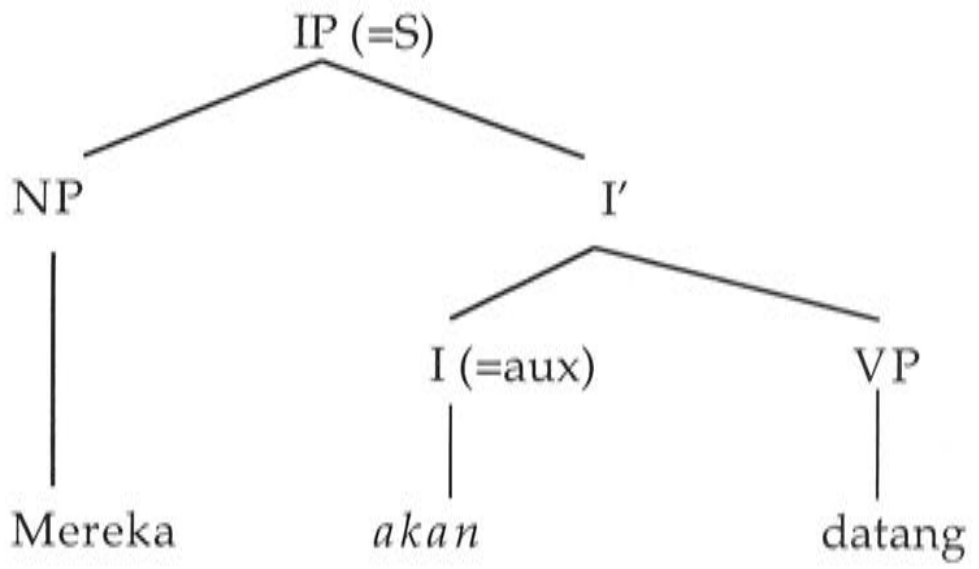
For simplicity, I will continue to use certain traditional symbols such as S (for sentence or clause) and aux (for auxiliary). For example, an auxiliary such as *akan* 'will' is classified as category I (inflection) in the standard X-bar schema. A sentence is a phrasal unit of this category (i.e. IP). Thus, the X-bar representation for (14) would be (26a-b), and a phrase structure tree of sentence (26c) is (26d).

(26) a. IP (=S) ---> NP I′

(26) b. I′ ---> I VP

(26) c. Mereka *akan* datang
3PPL will come
'They will come.'

(26) d.



Generally, I will also ignore internal phrasal complexities.[6] For example, when the focus of the discussion is on the linear order, the structural representation in (26d), which can also be represented using internal bracketing as in (27a), will be simplified as (27b).

(27) a. $[[NP\ [aux\ VP]_{I'}]_{IP(=SENTENCE)}$

(27) b. $[NP\ aux\ VP]_{SENTENCE}$

The analysis of a clause (=Sentence) as an IP implies that the head of a clausal unit is the I (or aux) category, which may or may not be overtly present. When it is absent, it is said that the predicate, which is typically a verb, occupies its position. Thus, the predicate can be structurally the head of the clause. Semantically, this is a good reason to argue that the predicate is

[6] In Chapters Four and Five, when describing the learners' language production, I will use the simplified form of the structure for ease of understanding.

the head of a clause, because the transitivity of the clause (i.e. the number of the arguments a clause has) is determined by the predicate.[7]

The X-bar analysis also allows us to capture the idea that, when the head of a clause is negated, the whole meaning of the clause is negated. The negator comes before the auxiliary (if any) or the predicate, as exemplified in (28a).

(28) a. Mereka *tidak* akan datang.
3Ppl not will come
'They will not come.'

The general pattern can be formulated as (28b):

(28) b. S ---> NP_{SUBJ} *neg* aux XP_{PRED}

The precise position and status of a negator in Indonesian syntax in terms of X-bar analysis has not been well investigated, so it is not certain whether it is a head constituting a negator phrase (NegPhrase) taking the auxiliary or verb as its complement, or whether it is an adjunct-like unit modifying the aux or verb. While further study is needed for a precise analysis, I will treat the negator as an adjunct-like unit on the grounds that its presence is optional and its main function is to modify (i.e. to negate) the head that it appears with. Thus, according to this view, the negator of a predicate, for example, is structurally an extension of the predicate. So, when the adjunct is added to the predicate (e.g. a V), it appears within the phrasal unit of the predicate (i.e. within VP). In an X-bar analysis, an adjunct can be represented as an adjunction to an X′ or to an XP. For example, sentence (29a) can be represented as having the structure shown in (29b), where *tidak* negates VP *makan nasi*. Since the V(P) is the head of the clause, the negation of the VP is generally also understood as the negation of the whole clause.

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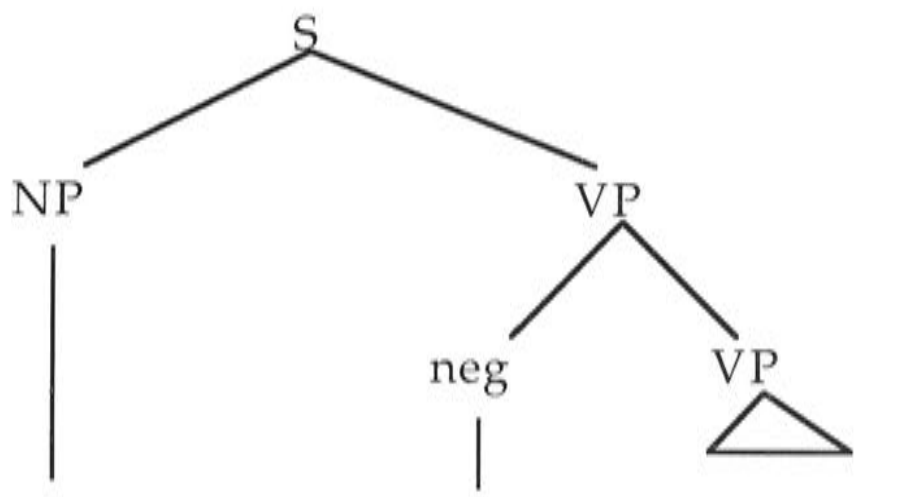
[7] That the aux (I) and predicate are the head of a clause is made explicit in some syntactic theories (Haegeman and Guéron 1999). For example, LFG shows this in its phrasal representation with certain annotations for the information coming from the I and V nodes (Bresnan 2001).

(29) a. Saya *tidak* makan nasi.
1Psg not eat rice
'I do not eat rice.'

(29) b.



'I do not eat rice.'

3.4.2 Types of Negators

Discussions of Indonesian grammar usually mention four different negators: *tidak* 'not', *bukan* 'not', *belum* 'not yet', and *jangan* 'do not' (Sneddon 1996: 195-197). The following section will outline the use of each of these negators, but will concentrate on the negators *tidak* and *bukan*, which are the most relevant to my study.

3.4.2.1 The Use of Negator *Tidak*

Tidak 'not' is used in sentences to negate verbal, adjectival and prepositional phrases. I will discuss each of these in turn.

3.4.2.1.1 *Tidak* to Negate Verbal Phrase

Tidak is used to negate a verbal phrase, and it precedes the main verb (30). When an auxiliary occurs, it precedes the auxiliary (31).[8]

(30) Dia *tidak* makan nasi.
3Psg not eat rice
'He does not eat rice.'

(31) Dia *tidak bisa* makan nasi.
3Psg not can eat rice
'He cannot eat rice.'

These two sentences illustrate the position of the negator in [NP_{SUBJ} + *neg* + VP_{PRED}] and [NP_{SUBJ} + *neg* + aux+ VP_{PRED}] structures.

3.4.2.1.2 *Tidak* to Negate Adjectival Phrase

To negate an adjectival phrase predicate *tidak* is used, and it is positioned before the adjectival phrase. Sentence (32) exemplifies the [NP_{SUBJ} + *neg* + AP_{PRED}] structure.

(32) Dia *tidak* tinggi.
3Psg not tall
'He is not tall.'

---

[8] In this thesis I refer to modals expressing concepts of possibility, ability and necessity as auxiliaries, because they function like ordinary auxiliaries such as *akan*; that is, they are closely associated with the predicate (cf Samsuri 1985; Sneddon 1996) and they structurally occupy the auxiliary position in Indonesian syntax.

3.4.2.1.3 *Tidak* to Negate Prepositional Phrase

Another use of *tidak* is to negate a prepositional phrase. In this case *tidak* is positioned before the prepositional phrase. This structure is exemplified in sentence (33).

(33) Dia *tidak* di dapur.
3Psg not at kitchen
'He is not in the kitchen.'

3.4.2.2 The Use of Negator *Bukan*

Bukan 'not' has several functions in Indonesian grammar. The most common is to negate the noun phrase predicate, but it can also be used as a contrastive negator and as a sentence tag. The following section will discuss these three uses of *bukan* in turn. The discussion will focus on the first two structures, because these are the most relevant to my study.

3.4.2.2.1 *Bukan* to Negate Nominal Phrase

The most prominent use of *bukan* 'not' in Indonesian grammar is to negate the noun phrase predicate. The negator is placed directly before the predicate of the sentence, as in sentence (34). The structure is therefore typically $[NP_{SUBJ} + neg + NP_{PRED}]_{SENTENCE}$.

(34) Ini *bukan* mobil Tony.
DET not car Tony
'This is not Tony's car.'

It should be noted that *bukan* is also used in circumstances where a noun is implied, even though it may not actually be present. For example, the question:

(35) Apa dia guru sekolah?
Q 3Psg teacher school
'Is he a school teacher?'

could elicit the answer:

(36) *Bukan*, dia *bukan* guru sekolah, dia guru universitas.
not, 3Psg not teacher school 3Psg teacher university
'No, he is not a school teacher, he is a university teacher.'

In informal speech, the response could be abbreviated to *Bukan, dia guru universitas*, or even simply *Bukan*. Note that, even where the NP_{PRED} is omitted in the answer, it is obligatory to use the nominal negation form *bukan* to negate the implied NP_{PRED}.

3.4.2.2.2 *Bukan* as Contrastive Negator

Another use of *bukan* is as a contrastive negator. It provides emphasis for a statement and indicates that a contradictory statement will follow (Sneddon 1996: 349). Compare sentence (37) and (38).

(37) Dia *bukan* kaya melainkan miskin sekali.
3Psg not rich but poor very
'He is (emphatically) not rich but very poor.'

(38) Dia *tidak* kaya melainkan miskin sekali.
3Psg not rich but poor very
'He is not rich but very poor.'

In (37) the first clause *Dia bukan kaya* 'He is not rich' shows that the speaker really wants to stress this message, and also gives a hint to the hearer that a contradictory claim would follow, ie *melainkan miskin sekali* 'but very poor.' In contrast (38) the use of *tidak* simply shows that it is a basic clause followed by subordinate clause introduced by *melainkan* (see Sneddon 1996:349-350).

3.4.2.2.3 *Bukan* as Sentence Tag

A third possible use for *bukan* is as a sentence tag. In this case, *bukan* is used to form a question where the speaker desires confirmation of the statement from the addressee (Sneddon 1996: 312). When used this way, *bukan* is positioned at the end of the statement. See (39) and (40).

(39) Dia sudah makan, *bukan*?
3Psg already eat not
'She has already eaten, hasn't she?'

(40) Dia tidak makan nasi, *bukan*?
3Psg not eat rice not
'She does not eat rice, does she?'

3.4.2.3 *Belum* as a Combination of Aspect Marker and Negator

Belum 'not yet' is used in declarative sentences to signify that an action has not been completed:[9]

(41) Dia *belum* tidur sejak tadi malam.
3Psg not yet sleep since last night
'He has not slept since last night.'

(42) Mereka *belum* dewasa.
3PPL not yet adult
'They are not adults yet.'

3.4.2.4 *Jangan* as Negative Imperative

Jangan is used for negative commands in imperative sentence contexts such as in signs in public places (43) or in prohibition to younger persons (44).

(43) *Jangan* merokok di pompa bensin!
don't smoke at pump petrol
'Don't smoke at the petrol station!'

(44) *Jangan* berlari!
don't run
'Don't run!'

[9] Sneddon states that *belum* 'not yet' combines the meaning of *tidak/bukan* plus the temporal marker *sudah* (Sneddon 1996:202).

In this thesis I will concentrate on the negator *tidak* to negate verbal and adjectival phrases and *bukan* to negate the noun phrase. The generalisation formulated as [NP_{SUBJ} + *neg* + aux + XP_{PRED}] (45) captures the distribution of the two main negators exemplified by the following structures:

(45) a. NP_{SUBJ} + *tidak* + (aux) + VP_{PRED}
AP_{PRED}
PP_{PPRED}

(45) b. NP_{SUBJ} + *bukan* + NP_{PRED}

3.5 The Syntax of Adjectives

This section discusses the syntax of Indonesian adjectives in terms of their two main functions: attributive and predicative. In its attributive function, an adjective phrase (AP) is a *modifier* or *attribute* of a noun within a noun phrase (NP), whereas in its predicative function it is a head predicate of a clause (cf Haegeman and Guéron 1999; Baker 1995; Horrocks 1987; Sells 1985; Radford 1992). In either function, depending on whether the head adjective (A) comes with additional units within the AP, the AP can be subcategorised into two types, namely 'simple' and 'complex'. The AP that is realised only by its head A will be referred to as a 'simple' adjective, other types of AP are 'complex'. Logically, there are four categories to be discussed:

	Predicative	**Attributive**
Simple	(i) simple predicative	(iii) simple attributive
Complex	(ii) complex predicative	(iv) complex attributive

In what follows, I will discuss the predicative adjective structures first, then the attributive adjective structures.

3.5.1 Predicative Adjective

Indonesian is unlike English in that the presence of a copula is not needed in a predicative adjective structure as exemplified by (46).

(46) Dia *cantik*.
she pretty
'She is pretty.'

In X-bar terms, the adjective *cantik* 'pretty' in (46) is the head of the adjectival phrase as well as the predicate of the whole clause.

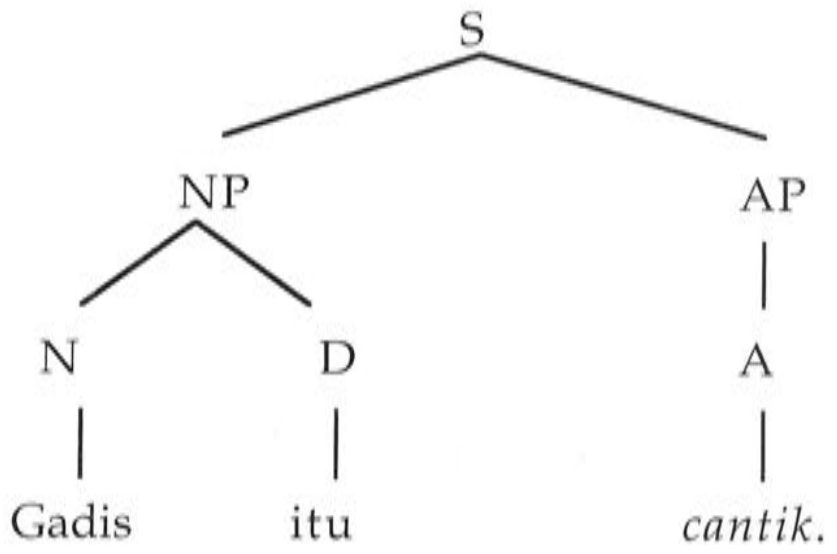
3.5.1.1 Simple Predicative Adjective

A simple predicative adjective structure is illustrated by sentence (47a).

(47) a. Gadis itu *cantik*.
girl the pretty
'The girl is pretty.

The tree diagram in (47b) demonstrates that this is a simple structure, where *cantik* 'pretty' is the head of AP and it is the only realisation of the AP. In other words, there is no other unit present within the AP.

(47) b.



For the analysis of the acquisition data in this thesis, if necessary, a simple predicative adjective structure will be represented as:

$S \dashrightarrow NP_{SUBJ} + [A]_{AP:PRED}$, or
$[NP_{SUBJ} + [A]_{AP:PRED}]_{SENTENCE}$.

That is, the sole unit of A within AP that takes an $NP_{SUBJECT}$ is a simple predicative adjective.

3.5.1.2 Complex Predicative Adjective Type 1 and Type 2

A structural unit is considered 'complex' in this thesis when it is realised by its head and at least one other unit. The relationship between the head and the other unit(s) can be of different kinds. The other unit can be in an attributive relation to the head, in which the structure may involve an embedded (relative) clause (with *yang*)[10]. Alternatively, there may be coordination involved with *dan* 'and' or *tetapi* 'but'. Each will be discussed and exemplified in turn.

A complex adjective phrase (AP) is therefore a phrase which is realised by an adjective lexical item which is extended with an additional unit, typically a

[10] *Yang* is a relative pronoun marker meaning 'who, which, that'. See 3.5.2.2.

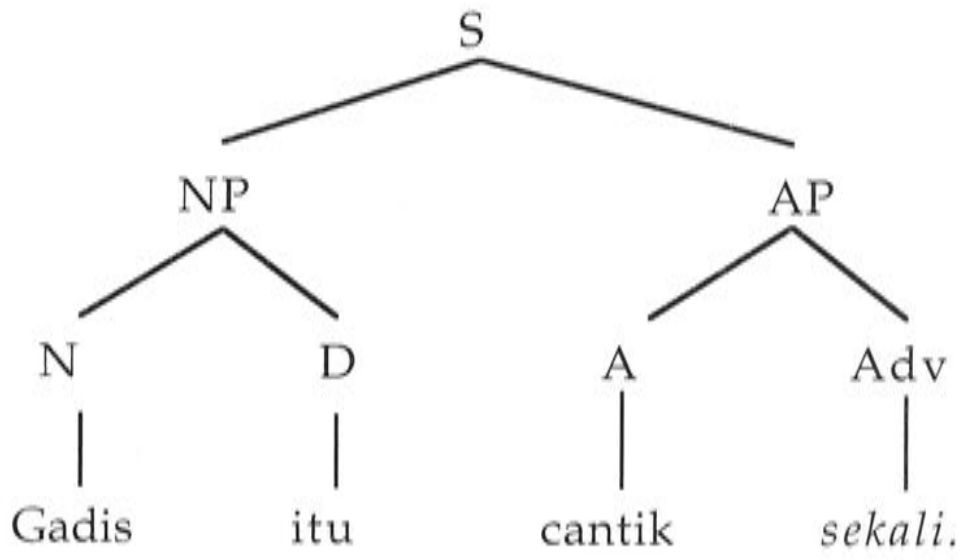
phrasal adverb.[11] In terms of the linear order of the adverb with respect to the head A, I distinguish in this study between two types of predicative adjective, which I refer to as type 1 and type 2.

Complex Predicative Adjective type 1 refers to a predicative AP in which the phrasal adverb follows the adjective lexical item. Consider sentence (48a) where *sekali* 'very' comes after the adjective *cantik* within the AP.

(48) a. Gadis itu cantik *sekali*.
girl DET pretty very
'The girl is *very* pretty.'

The phrase structure tree is shown in (48b).

(48) b.



When the phrasal adverb precedes the adjectival lexical item, it is referred to as a complex predicative adjective type 2. This is exemplified by sentence (49a) and the tree structure shown in (49b) where the phrasal adverb *terlalu* 'too' comes before the head adjective *sombong* 'arrogant' within the AP.

(49) a. Gadis itu *terlalu* sombong.
girl DET too arrogant
'The girl is *too* arrogant.'

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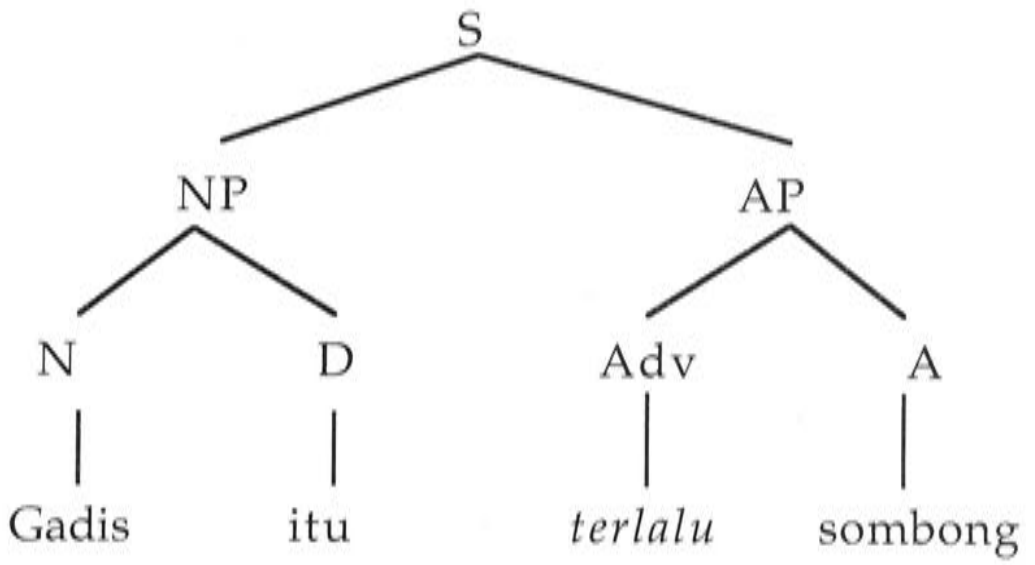
[11] A phrasal adverb modifies the adjective lexical item, and its position is fixed, whereas a sentence adverb modifies the whole sentence and its position is more varied (see 20a-c).

(49) b.



For practical reasons, in the discussion of the acquisition data, the two types of Complex Predicative Adjectives are represented as follows:

(50) a. Type 1: S ---> NP_{SUBJ} + $[A + Adv]_{AP:PRED}$

(50) b. Type 2: S ---> NP_{SUBJ} + $[Adv + A]_{AP:PRED}$

The table below shows a list of possible phrasal adverbs (drawn from Sneddon 1996: 177-178).

Phrasal adverbs that follow the adjective lexical item	Phrasal adverbs that precede the adjective lexical item
amat: rather	agak: rather
belaka: entirely	amat: very
benar: really	begitu: so, like that
sama sekali: entirely	begini: so, like this
sedikit: a little	cukup: enough
sekali: very	makin: increasingly
	relatif: relatively
	sangat: very
	sedikit: a little
	sungguh: really
	terlalu: too

Note that the phrasal adverb *sedikit* 'a little' is unique in that it may be used in either position.

3.5.2 Attributive Adjective

Recall that an attributive adjective is an adjective that modifies a head noun within a noun phrase (NP). It should be noted that other categories such a possessive pronoun (e.g. *saya* '1Psg', *(ka)mu* '2Psg') and determiner (DET) (*ini* 'this', *itu* 'that') may also appear within a noun phrase, for example (51 a- c):

(51) a. rumah saya
house 1Psg
'my house'

(51) b. rumah mahal itu
house expensive DET
'the expensive house'

(51) c. rumah mahal saya itu
house expensive POSS DET
'my house which is expensive'

In this section I will focus mainly on the adjective category. While the detail of other categories is ignored in certain circumstances, their (possible) presence will also be noted in the phrase structure. Two types of attributive adjective, 'simple' and 'complex,' will be distinguished and discussed in the following sub-sections.

3.5.2.1 Simple Attributive Adjective

The structure of the simple attributive adjective can be roughly formulated as follows:

(52) NP --> N + (A), or
$[N + (A)]_{NP}$

This formulation says that a head noun of the NP has a single adjective lexical item as an attribute. The idea that the A is only an attribute to the head, that is, not an obligatory part of the NP, is shown by putting A within brackets. Taking into account the common order of the possessive pronoun and determiner in Indonesian, as exemplified by *rumah mahal saya itu* (51c),[12] the NP could be shown to have the following possible internal structure:

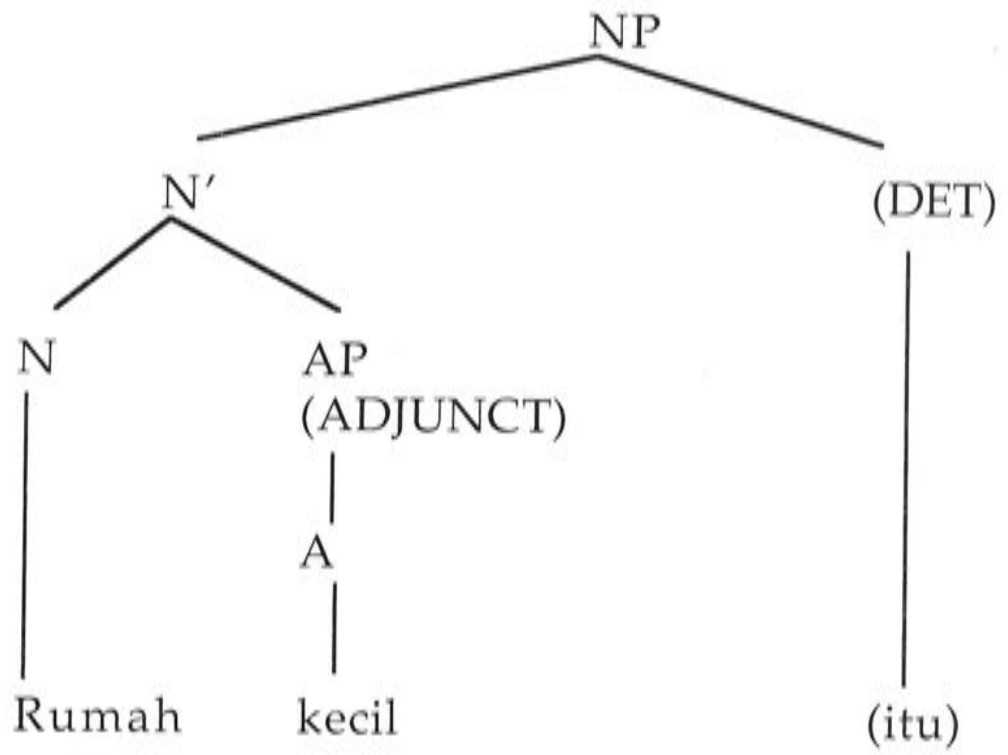
(53) NP --> N + (A) (+POSS) (+DET), or
$[N + (A) + (POSS) + (DET)]_{NP}$

The attributive function of the adjective is illustrated by example (54a). The adjective *kecil* 'small' is the attribute of the noun *rumah* 'house.' The phrase structure tree showing the attributive relation is given in (54b). Note that the attributive function is indicated by its function as an ADJUNCT explicitly annotated on the AP node.

(54) a. rumah *kecil* (itu)
house small DET
'the *small* house'

[12] While this is possible, the alternative structure with *yang* is more common: *rumah saya yang mahal itu* 'my house which is expensive'. As noted, the adjective appears to be a complex structure since it has to have *yang*. This is discussed in the next sub-section.

(54) b.



In some circumstances a combination of a noun plus an adjective can form a compound noun, where the meaning of the construction is not totally transparent or predictable. One way of distinguishing an ordinary attributive adjective within NP and an adjective of a compound is to determine whether the relativiser *yang* can be inserted between the noun and the adjective (cf Sneddon 1996: 146-147). An ordinary attributive adjective allows this but an adjective of a compound does not. For example, *orang tua* (LIT: 'person old') can be a compound meaning 'parent(s)', but it can be also an ordinary NP meaning 'an old person'. Likewise, *kamar kecil* (LIT 'room small') can be a compound meaning 'toilet' or an ordinary NP with an attributive adjective meaning 'small room'. The insertion of *yang* between the noun and the adjective is only allowed in the latter case, e.g. *orang yang tua* 'an old person' and *kamar yang kecil* 'a small room'. That is, *orang yang tua* can never mean 'parent'. Furthermore, a compound noun may co-occur with a predicative adjective that appears to be its antonym as in sentences (55a) and (55b).

(55) a. *Orang tua* saya masih muda.
person old my still young
'My *parents* are still young.'

(55) b. *Kamar kecil* itu besar sekali.
room small DET big very
'The toilet is very big.'

An ordinary attributive (with *yang*) would not be allowed in such constructions as it would be contradictory, as shown by (56a) and (56b).

(56) a. **Orang yang tua* itu masih muda.
person REL old that still young
'The old person is still young.'

(56) b. **Kamar yang kecil* itu besar sekali.
room REL small that big very
'The small room is very big.'

The table below shows some examples of compound nouns:

Noun	**Adjective**	**Compound Noun**
orang: person	tua: old	orang tua : parents
kamar: room	kecil: small	kamar kecil: toilet
kambing: goat	hitam: black	kambing hitam: scapegoat
rumah: house	sakit: sick	rumah sakit: hospital
meja: table	hijau: green	meja hijau: law court
pasar: market	gelap: dark	pasar gelap: black market

3.5.2.2 Complex Attributive Adjective

Recall that a structure is considered 'complex' when it is expressed by more than one unit: typically a head and extra unit(s) coming with the head. One type of complex structure involving the adjective which will be discussed in

this subsection is the structure where the adjective takes *yang*. *Yang* functions like a relative clause pronoun/marker in Indonesian and is therefore translatable into an English relative pronoun (*who, which,* etc.). For this reason, it will be simply glossed as REL(ativiser). Note that the whole *yang*-construction is in attributive relation to the noun head. Hence, the attributive relation of the *yang*-construction within the NP in the following examples can be translated in two ways: with or without a relative clause.

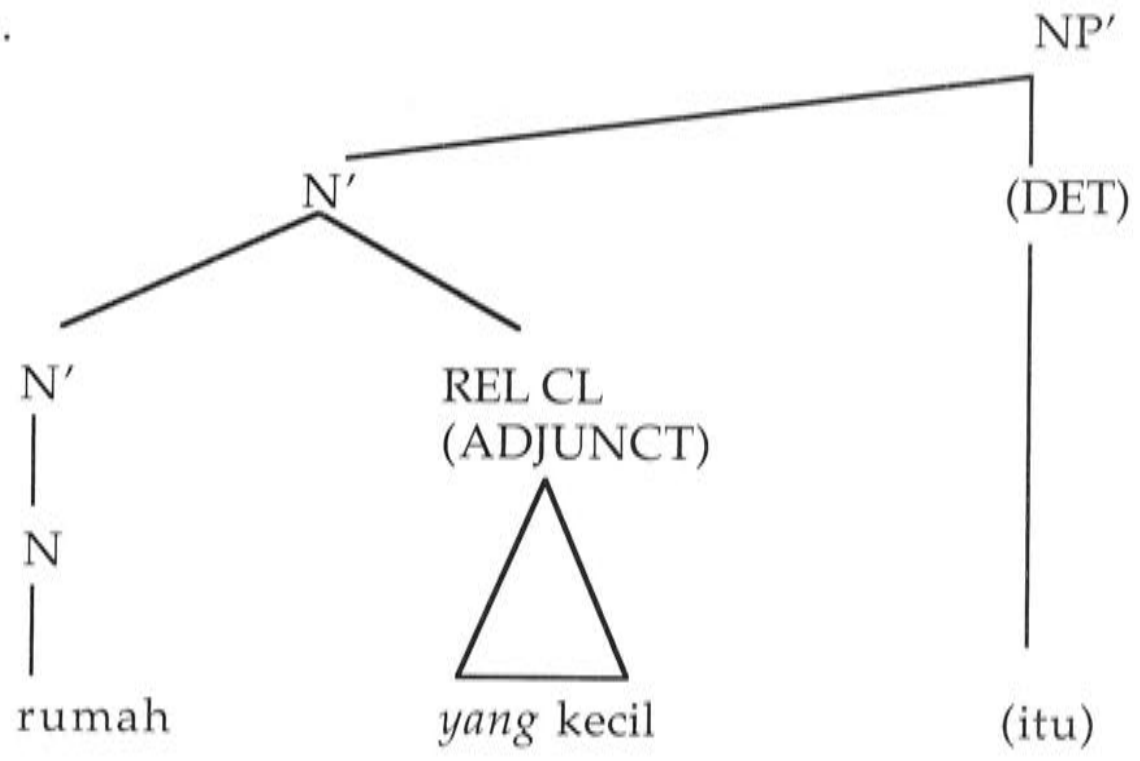
(57) a. rumah *yang* kecil (itu)
house REL small DET
(i) '(the) house which is small'
(ii) '(the) small house'

(57) b. orang *yang* ganteng itu
person REL handsome DET
(i) 'the person who is handsome'
(ii) 'the handsome person'

While there is no general consensus among linguists as to the exact status of *yang* (cf Steinhauer 1992; Simin 1983; Kaswanti Purwo 1983), Verhaar (1983) proposes that *yang* is referred to as a 'ligature' (a connector between two units). For the purposes of the present discussion it is clear that an adjective appearing in the *yang*-construction constitutes a complex structure. In all analyses of structures in this thesis, I will treat *yang* as a relative clause marker and the *yang*-construction as a relative clause construction. In the phrase structure tree, it will be represented simply as REL(ative) CL(ause). Thus, the NP containing [*yang*+A] as in *rumah yang kecil itu* (58a) can be represented as having the structure shown in (58b):

(58) a. rumah yang kecil itu
house REL small DET
'the small house'

(58) b.



Note that the complex structure [*yang kecil*] functions as an ADJUNCT to the noun head *rumah;* that is. the whole unit is in attributive relation with the noun head, just like the simple attributive adjective *kecil* in (54).

In contrast to the structure of the simple attributive adjective formulated in (52), a complex attributive adjective structure is represented as:

(59) NP ---> N + $[REL +A]_{REL\ CL}$ + (DET), or
$[N + [REL +A]_{REL\ CL} + (DET)]_{NP}$

It should be noted that the simple adjective (without *yang*) and complex attributive adjective (with *yang*, i.e. REL CL construction) differ in one crucial respect. While there can be more than one *yang*-clause (possibly containing more than one conjoined adjective) in a single NP, there is normally a limit of one simple AP per NP in the attributive position under the NP. Hence, Indonesian is unlike English in this case in that simple attributive adjectives are not recursive. Consider the *yang*-clause in example (60c), which is a complex adjective structure containing conjoined adjectives

(using *dan* 'and'). Structure (60c) can be thought of as merging the two simple adjective structures (60a) and (60b). In contrast to (60c), which is acceptable, (60d) is unacceptable because two simple attributive adjectives are stacked together without *yang*.[13]

(60) a. anak nakal itu
child naughty DET
'the naughty child'

(60) b. anak bodoh itu
child stupid DET
'the stupid child'

(60) c. anak *yang* nakal *dan* bodoh itu
child REL naughty and stupid DET
'the naughty and stupid child'

(60) d. *anak nakal bodoh itu
child naughty stupid DET
'the naughty stupid child'

3.6 Conclusion

In summary, it should be stressed that Indonesian does not always employ a verb as a predicate in a clause; other grammatical categories like adjectival, nominal or prepositional phrases can function as predicates as well. These non-verbal predicates are often called verbless clauses (see Haegeman and Guéron 1999). The simplified version of X-bar method adopted in this thesis serves the purpose of demonstrating the syntax of negation and the syntax of

[13] It is possible that in some circumstances two adjectives may form a compound, and the order is fixed, for example *lemah lembut* 'gentle,' *hitam manis* 'dark and attractive,' *halus mulus* 'fine and smooth' (see Sneddon 1996:176).

adjectives in Indonesian. Certain patterns with respect to the distribution of adjectives have been captured in terms of simple phrase structure rules and phrase structure trees. They are intended to provide a basic outline of Indonesian grammar for readers who are not familiar with the language. They also serve as necessary background to the discussion of the acquisition data in Chapters Four and Five.

CHAPTER FOUR

THE ACQUISITION AND DEVELOPMENT OF THE SYNTAX OF NEGATION

4.1 Introduction

This chapter presents my findings on the acquisition of the syntax of negation by the three learners, and a discussion of the findings. In parallel with the discussion of acquisition, I will also discuss the learners' pattern of development: this will look at their paths to acquisition and any developments in their IL that occur after acquisition.

The term acquisition used here is based on the frequency of the learners' production using the acquisition criteria outlined in Chapter Two. The discussion of acquisition also covers an outline of the relevant timing of acquisition for the three learners. It should not be assumed that the acquisition of a negation structure is a recognisable single event, after which a learner will generally continue to use the rule correctly. My data do not support this view; rather, my findings show that all the learners demonstrate a clear pattern of gradual development of negation structures, continuing both before and after acquisition. The term development is used here to refer to the progression of the learners' production from one form at one stage to another form at the next stage. I will present a detailed picture of the development of the learners' IL, and attempt to provide possible explanations of the learners' IL rules at various stages of development. It should be noted that the discussion of development does not necessarily apply the acquisition criteria, but focuses on the changing forms from one stage to the next stage in the learners' production.

As described in Chapter Three, Indonesian has four different negation forms, each of the forms being represented by a different lexical item; these are *tidak* 'not', *bukan* 'not', *jangan* 'do not' and *belum* 'not yet'. In this chapter, I will discuss the students' acquisition and development stages for the first two negators, concentrating on the acquisition of *tidak* 'not', used to negate verbal and adjectival phrases, and *bukan* 'not', used to negate noun phrases. I do not have sufficient data to discuss the negation of *jangan* 'do not' and *belum* 'not yet'; a detailed study of these negators might be a productive area for future research.

The discussion will first present a general description of my findings regarding the acquisition and development of negation, which is followed by a more detailed description and comments on verbal, adjectival and nominal negation for each individual learner. For each negation form, I will also present a detailed discussion of each learner's acquisition of negation and the development of their language productions. At the end of the chapter, I will compare my findings with the other relevant studies of negation.

4.1.1 A Note on the Syntax of Negation and Acquisition Criteria

As was explained in Chapter Three, *tidak* 'not' is used to negate verbal, adjectival and prepositional phrases. *Bukan* 'not' is used on the one hand to negate noun phrases, and on the other to refute a statement by the interlocutor, in so far as that statement relates to a noun (phrase). In addition, *bukan* may be used to refute and contradict a statement, and to frame a question seeking confirmation of a statement (equivalent to English question-tag). In other words, the use of *bukan* 'not' is marked compared with *tidak* 'not'. Because the last two usages of *bukan* were not presented to the learners during the first year Indonesian course, and I found no

evidence of these being produced by the learners, in this chapter I will focus only on the three sentence negation structures represented below: [1]

$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + VP_{PRED}$$
$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + AP_{PRED}$$
$$S \text{ ---> } NP_{SUBJ} + \textit{bukan} + NP_{PRED}$$

Definitions of production, development, onset and acquisition are discussed in detail in Chapter Two; I repeat here only the main points of each definition:

i) production: refers to the learner's actual utterance. Often, this may not be a complete sentence; it may be grammatically incorrect; or it may consist of a learned monomorphemic chunk. The forms produced will change from time to time;

ii) development: refers to the change from the production of one form to the production of another form. The analysis is not dependent on the number of examples produced;

iii) onset: refers to the regular, non-formulaic use of a structure. The use should be sustained over time, and self correction may appear. Learners produce the target structure in fewer than 2 out of 3 contexts;

iv) acquisition: is genuine spontaneous production. Learners apply the rule correctly in at least 2 out of 3 contexts, and using a variety of lexical items.

4.1.2 The Acquisition of Positive and Negative Sentences: A Comparison

In this section I will very briefly describe my findings with regard to the acquisition of positive and negative sentences to provide additional background information for the following discussion of the development

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[1] Unless otherwise stated the structures are the representation order of the units, they are not elaborate phrase structure rules of the target language.

and acquisition of negation.[2] Because I divide negation into three types, based on the category of the predicate, I will present the comparison between positive and negative sentences in the same way.

I found that the learners acquired positive sentences before the equivalent negative sentences. This is true for all the negation types and for all three learners. For example, the positive sentence structure

$$S \rightarrow NP_{SUBJ} + AP_{PRED}$$

is acquired before the negative equivalent

$$S \rightarrow NP_{SUBJ} + neg + AP_{PRED}$$

For these structures, Matt acquires the positive sentence in week 8, while Kate and Jane acquire it in week 9; this is described in more detail in Chapter Five in the section describing the acquisition of predicative adjectives (5.3). The acquisition of the positive sentence is followed some weeks later by the acquisition of the equivalent negative sentence - Kate and Jane in week 15, Matt in week 17.

Thus, there is a sequence of acquisition that appears to hold for all the negation types. As shown in the diagram below, each positive sentence structure is acquired before the negative sentence equivalent:

$$S \rightarrow NP_{SUBJ} + VP_{PRED} \Rightarrow S \rightarrow NP_{SUBJ} + neg + VP_{PRED}$$

$$S \rightarrow NP_{SUBJ} + aux + VP_{PRED} \Rightarrow S \rightarrow NP_{SUBJ} + neg + aux + VP_{PRED}$$

$$S \rightarrow NP_{SUBJ} + AP_{PRED} \Rightarrow S \rightarrow NP_{SUBJ} + neg + AP_{PRED}$$

$$S \rightarrow NP_{SUBJ} + NP_{PRED} \Rightarrow S \rightarrow NP_{SUBJ} + neg + NP_{PRED}$$

However, there does not appear to be any general sequential relationship between positive and negative sentences. In other words, it is possible for a learner to acquire the negative sentence structure for one predicate category

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[2] A detailed comparison of the sequences of acquisition for positive and negative sentences will not be presented in this chapter. I have excluded the full analysis from this study for reasons of space, although some of the data can be found elsewhere in Chapter Four and Chapter Five. For example, the predicative adjective described in Chapter Five is the positive sentence equivalent of adjectival negation described later in this chapter.

without necessarily acquiring the positive sentence structure for other predicate categories. Matt, for example, acquires the verbal negation structure S -> NP_{SUBJ} + *neg* +VP_{PRED} in week 2; but the positive predicative adjective structure S -> NP_{SUBJ} + AP_{PRED} is acquired after this, in week 8.

4.2 The Acquisition Sequence of Negation

The acquisition of negation is very similar for all of the three learners who provided data for this study. Matt, Jane and Kate all follow the same basic sequence of acquisition, that is:

Verbal Phrase ⇒ Adjectival Phrase ⇒ Nominal Phrase

Although the timing is different for the three learners, the pattern is very clear. Verbal negation[3] is produced and acquired first, followed by adjectival, and the nominal phrase negation is last.

It is not surprising that nominal negation is the last of these structures to be acquired. I have already pointed out that *bukan* 'not' is 'more marked'[4] than *tidak* 'not'; this might be one of the reasons why it is acquired late. Since the principal use of *bukan* is to negate noun phrases, it would seem that learning to identify the grammatical category of a noun phrase would be a pre-requisite. However, learning to identify a NP may not be straightforward, as the presence of a noun phrase may not be obvious, but rather is implied in the conversation contexts.

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[3] Unless otherwise stated, the term verbal negation is used as a general term in this thesis, and refers to verbal negation with or without auxiliaries.

[4] In this thesis, the term 'more marked' refers to the more restricted use of the negator *bukan* 'not' compared to the negator *tidak* 'not', which I refer to as 'less marked' (cf. Crystal 1997: 233-234). The term as used in this study does not bear any relation to 'markedness theory' (see Chomsky and Halle 1968; Hyman 1975; Zobl 1983; Hyltenstam 1984, 1986).

It is not so clear why there is a difference in acquisition times between verbal and adjectival negation. At first sight, there is little difference in the construction of the phrases in Indonesian, since they take the forms

$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + VP_{PRED}$$
$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + AP_{PRED}$$

Because verbal and adjectival structures both use the negator *tidak*, 'not' positioned before the predicate, the learners' task should not be complicated either by the need to identify the grammatical category of the verb or adjective, or by the positioning of the negator. However, it does appear that there is a difference in how learners perceive the structures, to the extent that adjectival negation is not acquired until verbal negation has already been acquired. This is true for all the learners in my data; and, although the empirical observations are clear, the theoretical justification for the observed sequence is unclear. A possible explanation is that students whose L1 is English will not use the adjectival negation structure naturally, because English does not use sentences with an AP predicate. However, in order to determine whether a student's L1 background has any effect on the acquisition sequence, it would be necessary to conduct studies with students from varying backgrounds.

In the following section, I will outline the learners' stages of development for negation. This will be followed by descriptions of the acquisition of verbal, adjectival and nominal negation in turn; dealing in general terms with the acquisition of all three structures, followed by a detailed discussion of each individual learner's development and acquisition of the structure.

4.2.1 The Development Sequence of Negation

In this section, I will look at the sequence of development of negation structures. The learners demonstrate a clear pattern of gradual development of negation structures, both before and after acquisition. This pattern is very similar for all three learners. I found that their development of negation structures can be divided into four stages, which will be described in detail below. It is, however, important to remember that the discussion of development does not consider the same criteria as the discussion of acquisition. For example, in the early stages of development, the learners may still be using formulaic language or unanalysed structures, and therefore cannot be considered to have acquired the structure. However, I have found that the use of formulaic language is an important stage in the development of the learner's language, so it needs to be covered in the discussion of development.

In Tables 4.1a, 4.1b and 4.1c below, I set out a description of the stages[5] of development I observed for each type of negation. Each type develops in a similar sequence, with similar stages: but the stages are not necessarily concurrent for the three types. Thus, for example, I found that when the learners developed to stage 2 for verbal negation they were still at stage 1 for adjectival and nominal negation. The tables show the principal structures of each stage of negation for each of the three negation types. I will discuss each stage separately later in the chapter.

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[5] The stages of development described in Tables 4.1a to 4.1c differ from the developmental stages proposed by Pienemann (1998:116). Each of Pienemann's stages relates to the development of a different language structure, related to the gradual development of the learner's processing skills. In this study, the stages describe the emergence of a particular structure, without relating this to the development of subsequent structures.

Table 4.1a: The Development Stages for Verbal Negation

Stage 1	- Ø *tidak* Ø - * *bukan* VP_{PRED} - *VP_{PRED} *bukan*
Stage 2	- *tidak* VP_{PRED}: acquisition
Stage 3	- *tidak* aux VP_{PRED}: formulas
Stage 4	- *tidak* aux VP_{PRED}: acquisition

Table 4.1b: The Development Stages for Adjectival Negation

Stage 1	- Ø *tidak* Ø
Stage 2	- *tidak* AP_{PRED}: formulas
Stage 3	- *tidak* AP_{PRED}: onset
Stage 4	-*tidak* AP_{PRED}: acquisition

Table 4.1c: The Development Stages for Nominal Negation

Stage 1	* Ø *tidak* Ø
Stage 2	* Ø *tidak* NP_{PRED}
Stage 3	- Ø *bukan* Ø: onset - *bukan* NP_{PRED}: onset
Stage 4	- *bukan* $NP_{PRED:}$: acquisition

In these tables I have used the notation Ø to denote an empty position in the phrase. That is, where I have written Ø *tidak* Ø, this represents the single word sentence of the learners' language. I have used this notation, because Indonesian does not use negation in the same way as the English all-purpose negator 'no'. In English, it is possible to answer with a simple 'no' to questions like: 'Do you work?'; 'Are you hungry?'; or 'Is this a car?'. In Indonesian, the choice of which negator to use - *tidak* 'not' or *bukan* 'not' - depends on the category of the predicate being negated.

Consider the following questions:

(1) Apa-kah kamu bekerja?
Q -marker 2Psg work
'Do you work?'

(2) Apa-kah kamu lapar?
Q -marker 2Psg hungry
'Are you hungry?'

(3) Apa-kah ini mobil?
Q -marker DET car
'Is this a car?'

Sentence (1), where the question is framed around the verb *bekerja* 'work', could elicit the answer *tidak* 'not' (at the very least); as could sentence (2), framed around the adjective *lapar* 'hungry'. However, sentence (3), framed around the noun *mobil* 'car' would require the answer *bukan* 'not'. Furthermore, although a single word answer to the above questions is possible, this may sound abrupt to an Indonesian native speaker, so would generally be avoided in formal Indonesian.[6] For this reason, and in order for learners to make the distinction between the use of *tidak* and *bukan* reliably, the University Indonesian course taught students to frame answers as a complete sentence. However, in the early stages of language development, learners may produce single word answers. I treat these single word answers as a one word sentence. They are not treated as errors, since they may be grammatically correct.

The stages of development I have outlined in Tables 4.1a to 4.1c are based on my analysis of the data collected; in other words, based on the learners'

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[6] A single word answer, using *tidak* or *bukan*, is sometimes acceptable in informal Indonesian. However, this was not taught to the students.

actual production. In stage 1, all learners appear to use mainly the form Ø *tidak* Ø for verbal, adjectival and nominal negation. In stage 2, the learners produce some complete phrases, although the negator *tidak* is still used for all forms of negation. Table 4.1a shows that stages 3 and 4 for verbal negation cover the development of verbal negation with an auxiliary. The distinction between stages 2 and 3 adjectival negation is quite small (Table 4.1b); I consider that there is a point where the learners begin to move away from the use of formulas and start to use analysed utterances: this marks the onset of adjectival negation. The acquisition of adjectival negation follows in stage 4. Table 4.1c shows that the learners begin to use *bukan* regularly for nominal negation in stage 3, followed by acquisition in stage 4.

In some cases, learners may use negation forms typical of two stages of development in the same week, even, in some cases, using forms typical of a stage prior to their current stage of development. I do not believe this invalidates the description of the stages of development: these were not intended to be rigid stages; rather they are an indication of the gradual process of development of the learners' IL, during which they will typically produce a range of forms at different times, tending to produce the more complex forms, closer to the TL norms, as the IL develops.

It is important to note that the stages of development outlined in Tables 4.1a to 4.1c do not necessarily indicate the point at which a structure will be acquired. For example, my data indicate that verbal negation was acquired while the learners were at stage 2 of their development. While they were all able to use the rule for verbal negation appropriately, the development of their IL did not stop at the point of acquisition. Specifically, at stage 2, the use of auxiliaries in negation still appears to be unanalysed. Subsequently, as the learners' IL develops, analysed auxiliaries appear at stage 3, before verbal negation with an auxiliary becomes fully acquired at stage 4.

In general, all the learners proceed along the same development path, going through all four stages of development for each negation type. Although, in most cases, the learners do not skip stages, there seem to be some exceptions to this. For example, Matt does not produce much data for stage 1 of verbal negation. However, since Matt had previously learned Indonesian, it is likely that he would have completed this stage in his previous course. Because Matt is not a beginning learner, I have no evidence that Matt did not go through stage 1 of verbal negation, nor is there any evidence that he did. Also, Jane does not produce any examples of stage 3 for verbal negation, but this could be because there were insufficient contexts for her to produce examples of this stage. It should be stressed that the lack of evidence does not necesarily show that it is possible for learners to skip a development stage: it may be simply that there were no examples in the data collected.

4.2.2 The Acquisition of Verbal Negation: An Overview

My data reveal that verbal negation[7] is the first of the negation structures to be acquired by the learners. It is clear that it is perceived as the 'easiest' of the three structures which I have investigated, since it appears early in the IL of all three learners and the frequency of production and accuracy are both very high. However, it should be noted that the development of verbal negation takes place over an extended period: in fact the passage from using one-word negation at the first stage of development to the final realisation of the negator positioned before any auxiliary or main verb takes between 28 and 30 weeks. Thus, although verbal negation is invariably the first structure to be acquired by the learners, it takes a long time to develop all the rules for using verbal negation, especially the positioning of the negator before the auxiliary. For this reason, I will discuss the acquisition of verbal negation with auxiliaries separately.

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[7] Recall that, unless otherwise stated, the term verbal negation refers to verbal negation with or without auxiliaries.

It should be noted that in this thesis I use the term 'auxiliary' in the broader sense (cf Samsuri 1985; Muliono et al. 1988; Johns 1989; Alwi 1992). The category auxiliary covers two groups of verbs, they are:

i) a closed set of 'true' or 'proper' modal verbs, such as: *bisa* 'can', *boleh* 'may', *harus* 'must', and *akan* 'will' (indicating a future event);

ii) a group of verbs such as *mau* 'want', *suka* 'like'.

Although both groups could be called modal auxiliary, because structurally they appear before the verbs and express modality, the second group behaves more like ordinary verbs, in that these verbs can be used independently, which is not possible with verbs from the first group. For example, sentence (4) below is a possible Indonesian sentence, whereas (5) is not:

(4) Dia suka sate.
3Psg like satay
'He likes satay.'

(5) * Dia akan sate.
3Psg will satay
'He will satay.'

In the following sections, I will first examine the acquisition of verbal negation using the form S ---> NP_{SUBJ} + *tidak* + VP_{PRED} - that is, stages 1 and 2 in Table 4.1a. This will be followed by a separate discussion of verbal negation with an auxiliary, using the form S ---> NP_{SUBJ} + *tidak* + auxiliary + VP_{PRED} - that is, stages 3 and 4 in Table 4.1a.

Table 4.2 shows the accuracy rates for the learners' production of verbal negation at the time of acquisition. All of the three learners have accuracy rates between 82 and 92 per cent.

Table 4.2: The Accuracy Rates at the Time of Acquisition for Verbal Negation: Matt, Jane and Kate

	Matt	Jane	Kate
Week of acquisition	2	8	8
Accuracy rate	83%	82%	92%

From Table 4.2 we can see that verbal negation is acquired relatively early by the three learners. Matt acquires it in the second week of interviews, followed by Jane and Kate in week 8.

In Matt's case, it is not surprising that he acquires verbal negation early; his recreational course before enrolling to study Indonesian in the University appears to have given him an early advantage over Jane and Kate, who were beginners with no knowledge of the target language at the outset. But even so, Jane and Kate catch up with Matt in acquiring verbal negation six weeks later.

4.2.2.1 The Acquisition of Verbal Negation: Matt

Table 4.3 shows Matt's production of verbal negation in the form

$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + VP_{PRED.}$$

over the entire period of observation. Using the acquisition criteria developed for this thesis, Matt acquires verbal negation in week 2 of the interviews. Throughout the period of data collection, Matt's frequency and accuracy of production for verbal negation are quite high, and he uses a variety of lexical items, showing that his acquisition is secure. Although Matt does make some errors after acquisition, it is often the case that Matt's incorrect rule applications in fact reveal the continuing development of his IL: some examples will be discussed in the following sections.

Table 4.3: The Acquisition of Verbal Negation: Matt

	tidak + VP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	5/6	0.83
4	9/11	0.82
8	6/6	1
9	[2/2]	[1]
11	5/5	1
12	3/3	1
13	6/6	1
15	7/9	0.78
16	7/7	1
17	5/7	0.71
21	[2/2]	[1]
24	4/5	0.8
27	10/11	0.91
30	4/4	1
33	10/10	1
37	11/13	0.85
39	5/5	1
41	15/15	1
45	6/6	1
51	7/7	1
53	15/16	0.94
68	12/13	0.92

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Also, the number of correct rule applications still surpasses the incorrect rule applications, so the frequency of incorrect rule applications is in fact very low.[8]

In Table 4.3, the first column shows the number of applications of the rule, followed by the number of contexts for using the rule in the TL. Thus in week 2, 5/6 means Matt applied the rule on 5 out of 6 possible occasions. The second column shows the proportion of correct applications of the rule, expressed as a decimal. Figures in brackets [1], [2/2] indicate that there were fewer than 3 contexts, so that the data for that cell should not be used for indicating acquisition or otherwise. The shaded cell indicates the point of acquisition.

In week 2 Matt is at stage 2 of development, and is able to use the verbal negation *tidak* + VP_{PRED}. For example:

(6) Iw: Matt ada adik perempuan?
Matt have younger sibling female
'Do you have a younger sister?'

(7) M: Saya er tidak er er ada adik perempuan.
1Psg er not er er have younger sibling female
'I er do not er er have a younger sister.'

(Mw2s84)

In week 2, Matt produces one example which could be considered stage 1, see (9) below. Here Matt produces Ø *tidak* Ø, where the context requires him to apply the verbal negation form *tidak* + VP_{PRED} (*tidak mengajar* 'not teach'), at least.

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[8] In week 2 Matt applies the verbal negation rule 5 times out of a possible 6, giving an accuracy rate of 83 per cent; again in the following interview (week 4) he applies the rule 9 times out of 11, giving an accuracy rate of 82 per cent.

(8) Iw: Apa-kah istri Matt mengajar?
Q-marker wife Matt teach
'Does your wife teach?'

(9) M: Tidak er.
not er
'Not er.'

(Mw2s277)

The expected complete answer here would be *Tidak, dia tidak mengajar.* 'No, she does not teach.' Since this kind of utterance appears in only 1 out of 6 contexts, there is not really any clear evidence for Matt going through stage 1 of verbal negation. Matt's verbal negation performance in week 2 demonstrates quite clearly that he has developed to stage 2, with 3 out of 6 contexts showing appropriate use of the form *tidak* + VP_{PRED}, with only one stage 1 'single word' utterance of ∅ *tidak* ∅ 'not'.

Matt's one error in week 2 (11) is further evidence for his acquisition of verbal negation at week 2. In this case he overgeneralised the rule of the TL: when he was asked (10) whether he had had lunch, he answered *tidak* 'no' instead of *belum* 'not yet'. In this circumstance, the target language requires him to say *belum* 'not yet', instead Matt uses *tidak* 'not'. The use of *belum* was introduced at the same time as verbal negation using *tidak,* and extensively drilled (Johns 1989:25-27). It is likely at this point of time Matt has not worked out when to use *belum* 'not' in constrast to *tidak* 'not'. In other words, he extends the use of *tidak* to negate an aspect of the event, which in the TL requires *belum* rather than *tidak*. Sentence (11) is Matt's only error in week 2.

(10) Iw: Apa-kah Matt sudah makan siang?
Q-marker Matt already eat afternoon
'Have you had lunch yet, Matt?'

(11) * Tidak er saya makan siang nanti.[9]
Not er 1Psg eat afternoon later
'Not er I have lunch later.'

(Mw2s58.)

In subsequent weeks, Matt shows no hesitation in using verbal negation. He produces many examples of verbal negation, most of which are correct and all of which are spontaneous. For example, in week 4, his rule application in (13) was not prompted by the interviewer (12). The interviewer asked him whether he needed a permit to go to East Timor, and Matt spontaneously answered that he did not (intend to) visit East Timor. Matt's application of *tidak* 'not' before the verbal *berkunjung* 'visit' is contextually correct and his answer is appropriate to the question.

(12) Iw: Matt kalau pergi ke Timor Timur harus ada izin?
Matt if go to Timor East must have permit
'Matt if you go to East Timor must you have a permit?'

(13) Saya tidak berkunjung Timor Timur.
1Psg not visit Timor East
'I do not visit East Timor.'

(Mw4s240)

Matt also uses a variety of vocabulary, thus he has fulfilled all the acquisition criteria set out in Chapter Two. For example, in week 8, when discussing his family, Matt produces (14), without any prompting:

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[9] The interview was conducted at lunchtime. In this case, the answer *Tidak, saya makan siang nanti* is inappropriate and Matt would be expected to use *belum* 'not yet' rather than *tidak*. Matt's sentence could be regarded as correct if the same question (10) were asked in early morning. However, this distinction was not presented in the input received by the students.

(14) Saya tidak mau anak banyak.
1Psg not want child many
'I don't want many children.'

(Mw8s183)

Although I consider that Matt has acquired the verbal negation structure, he does continue to produce some structures which, for the other learners, appear only at the early stages before acquisition. For example, in (15), Matt uses the structure **bukan* + VP_{PRED}:

(15) *Saya bukan tahu istri.
1Psg not know wife
'I did not know my wife.'

(Mw4s321)

Matt does not produce this structure before the acquisition of verbal negation. It is an overgeneralisation of *bukan* that occurs later in his development, both before and after his acquisition of nominal negation.

Most of Matt's errors occur in subsequent weeks as he tries to work out the rules for nominal negation using *bukan* + NP_{PRED}. Matt tends to concentrate on his communication needs, and is actively trying to expand the boundaries of his IL in order to express his meaning. He is willing to experiment with the language to try and work out the target language negation rules, and sometimes will sacrifice strict grammatical correctness in order to convey his message. In the course of this process, there are several occasions when he uses *bukan* instead of *tidak* for verbal negation. This is especially noticeable in week 37, a few weeks after his acquisition of nominal negation;[10] here he uses the nominal negator several times to negate verbs.

[10] This will be discussed in more detail under nominal negation in section 4.2.4.1.

For example, (16):

(16) * Oh dia bukan tahu ... gambar salah. ((laugh))
oh 3Psg not know ... picture wrong
(LIT: 'She not know ... that is the wrong picture.')
(FOR: 'She does not know ... that is the wrong picture.')
(Matt was looking at and commenting on a picture of a policewoman arresting a thief.)

(Mw37s226)

It is worth noting, though, that the frequency of errors is low: Matt has only 13 errors out of more than 169 utterances between weeks 2 and 68, so more than 92% of his rule applications are correct. It is clear that Matt acquired verbal negation early, and also that it is retained for the whole period of the interviews.

4.2.2.1.1 The Acquisition of Verbal Negation with Auxiliary: Matt

In this section I will describe the acquisition of verbal negation using auxiliaries. Although not many natural data were collected for this structure, I am able to give an overview of what appears to be happening in the learner's IL.

The negation with auxiliary is presented in the form:

$$S \text{ ---> } NP_{SUBJ} + \textit{tidak} + \text{auxiliary} + VP_{PRED}$$

In the previous section, I mentioned that Matt acquired verbal negation very early (from week 2). The data shown in Table 4.4 reveal that this is not the case for his performance in negation with auxiliary: Matt demonstrates that he has acquired the structure in week 30. Prior to this, there is insufficient evidence for acquisition, with one occurrence in each of weeks 4, 13, and 24.

Table 4.4: The Acquisition of Verbal Negation with Auxiliary: Matt

	tidak + aux + VP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4	[1/1]	[1]
8		
9		
11		
12		
13	[1/1]	[1]
15		
16		
17		
21		
24	[1/1]	[1]
27		
30	3/3	1
33		
37	[1/1]	[1]
39	[2/2]	[1]
41	3/3	1
45	[2/2]	[1]
51	[1/1]	[1]
53	3/3	1
68	3/3	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Matt's first attempt to use an auxiliary in his negation production (17) appears to be based on a stock phrase that was drilled in the class. In this sentence, Matt changes the NP_{SUBJ} from *dia* 'he' (in the class drill) into *saya* 'I'.

(17) Saya tidak mau tinggal di Indonesia.
1Psg not want live at Indonesia
'I do not want to live in Indonesia.'

(Mw4s40)

My data show week 30 as the acquisition time for Matt in using auxiliaries in his verbal negation: he produces 3 correct examples out of 3 possible contexts. Through his usage of different lexical auxiliary items, Matt demonstrates that he has analysed the auxiliaries. The most significant point is his usage of the auxiliary *harus* 'must' in (18). I regard this as analysed grammar: auxiliaries such as *mau* 'want', *bisa* 'can', *suka* 'like', and *boleh* 'may' were presented many times in the textbook drills as a models for substitution drills, but the auxiliary *harus* 'must' was not.

In (18) Matt's conversation partner asks him to give her an extension to submit her assignment and Matt refuses by saying that he does not have to give her an extension. His construction using *tidak* + *harus* + VP_{PRED} is spontaneous and contextually appropriate and resembles that of a native speaker of the TL in this context.

(18) Saya tidak harus memberikan Anda perpanjangan.
1Psg not must give 2Psg extension
'I do not have to give you an extension.'

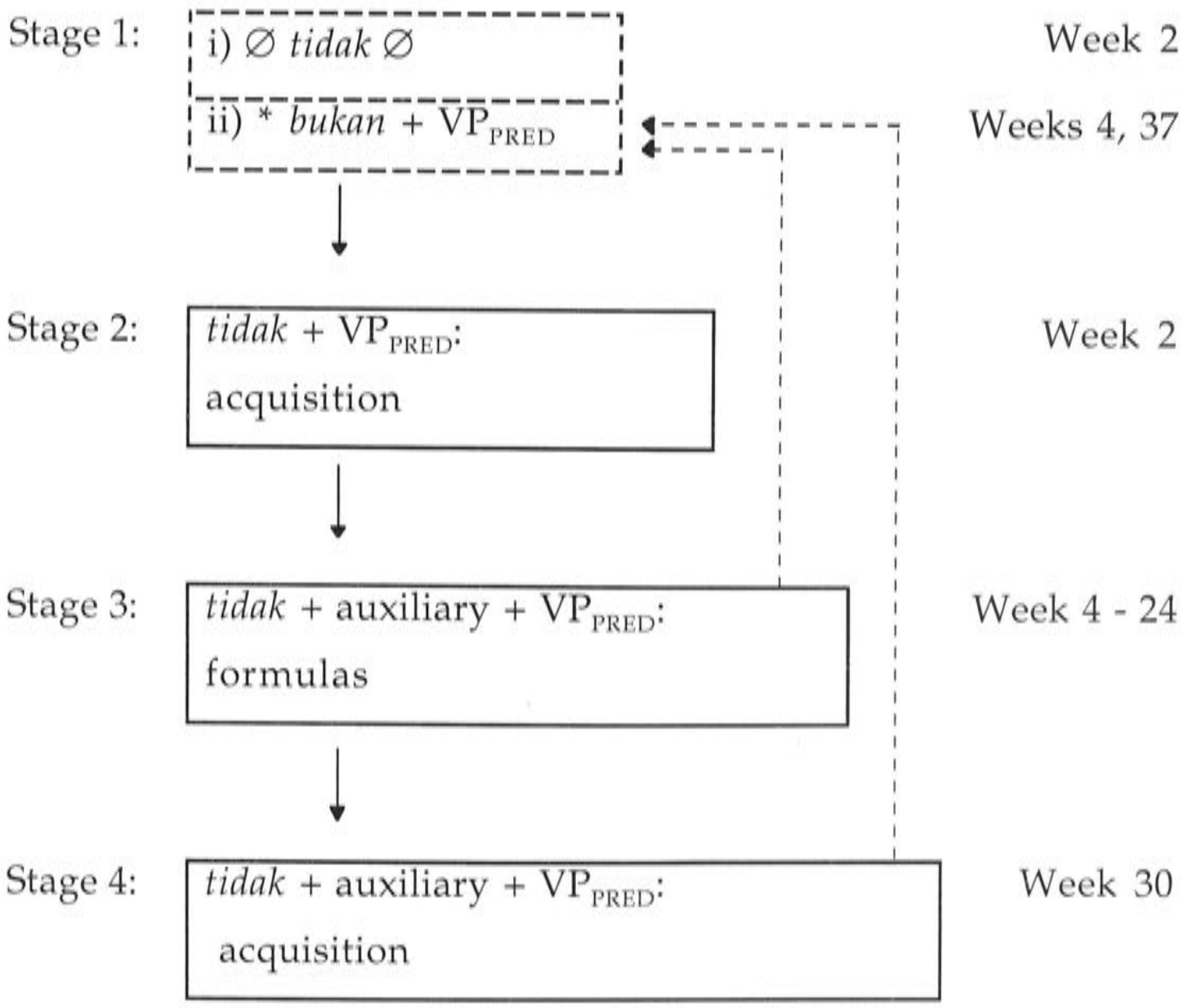
(Mw30s83)

As we can see from Table 4.4, after Matt acquired verbal negation with auxiliary, he continued to use it quite regularly in the weeks from week 37 up to week 68. Although Matt did not produce many examples of negation

with an auxiliary, his regular use of the structure after week 30, in lexically varied contexts and without errors, provides enough supporting evidence that he has analysed the grammar in his IL. The small number of occurrences may be because the natural data collected did not frequently require Matt to use verbal negation with auxiliaries: there does not appear to be evidence of Matt using an avoidance strategy in a context which required the structures.

To summarise, it appears that Matt's verbal negation changes form from one stage to the other, according to the IL grammar at one point of time. Diagram 4.1 shows the stages that Matt seems to pass through prior to his acquisition of verbal negation.

Diagram 4.1: The Development Stages of Verbal Negation: Matt



It appears that Matt goes through several different stages before he acquires verbal negation using auxiliary. There is not much evidence for stage 1: he uses ∅ *tidak* ∅ only once in week 2. For this reason, I have shown stage 1 with a dashed border. Matt first acquires the rule of verbal negation without the auxiliary (stage 2), then in stage 3 he uses auxiliary, but in unanalysed chunks, until finally he acquires the rule of verbal negation with auxiliary (stage 4). I have also inserted dashed lines from stages 2 and 4 back to stage 1: this convention is used to show that Matt is producing a form which, for the other learners, is typical of stage 1. Matt uses the structure **bukan* + VP_{PRED} several times after acquiring verbal negation, most notably when he is in the process of acquiring nominal negation.

4.2.2.2. The Acquisition of Verbal Negation: Jane

Jane's acquisition of verbal negation is, like Matt's, very early. This shows that the verbal negation rule seems to be worked out relatively quickly in her IL. The data in Table 4.5 show that Jane acquires verbal negation in week 8 (a little later than Matt). It appears that once the structure is acquired the majority of her productions of verbal negation are correct and her errors rapidly cease. From week 16 to week 68 Jane does not produce any errors. A more detailed discussion of this is presented below.

Table 4.5 presents the acquisition picture of verbal negation in the form

$$S \text{ ---> } NP_{SUBJ} + tidak + VP_{PRED}$$

Table 4.5: The Acquisition of Verbal Negation: Jane

tidak + VP_{PRED}		
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4	[1/2]	[0.5]
8	9/11	0.82
9	[1/1]	[1]
11	7/7	1
12	10/10	1
13	5/5	1
15	27/28	0.96
16	15/15	1
17	9/9	1
21	5/5	1
24	21/21	1
27	18/18	1
30	12/12	1
33	17/17	1
37	18/18	1
39	18/18	1
41	12/12	1
45	8/8	1
51	15/15	1
53	13/13	1
68	26/26	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Let us look at Jane's performance in more detail to analyse her probable language system with respect to verbal negation. In particular, I will consider the period from week 4 to week 8, because these two weeks seem to be the crucial time in Jane's acquisition path. In week 4 (20), Jane had two contexts to produce negation, but in one of these she inappropriately applied the obligatory rule. The context required verbal negation *tidak* + VP_{PRED} (the auxiliary is not required in the context), but Jane used the nominal negator *bukan* 'not' instead of the verbal negator *tidak* 'not'.

(19) K: Apa ada mobil kamu?
Q have car 2Psg
'Do you have a car?'

(20) * Er bukan ada mobil (..). Apa Kate suka makan pagi?
er not have car Q Kate like eat morning
'Er not have a car. Do you like having breakfast?
(Jw4s40)

Jane's rule application of negation (20) is inappropriate. At this point Jane and her partner are apparently practising the repertoire that they have learned in the class, as shown by the fact that their utterances are not cohesive with the question being asked. Jane's answer to the question whether she had a car (19) is appropriate (20), but she follows this with an unrelated question, asking her conversation partner whether she liked having breakfast. This second part of Jane's utterance is based on a model which was presented in the textbook and used for substitution drills in class:

(21) Apa Ayah suka minum kopi?
Q father like drink coffee
'Does father like drinking coffee?'
(Johns 1989:36)

At this point of time, Jane and her conversation partner are reproducing sentences which were practised in class as part of a substitution drill, similar to the textbook sentence pattern. It is understandable that Jane should be practising repertoire at this point; since she had not received much input either in grammar or vocabulary. However, her error illustrates how she perceived the TL in her IL. Although one occurrence is insufficient to draw a firm conclusion about Jane's IL rules, the data show that her IL for verbal negation includes **bukan* + VP_{PRED}.

In the other context for week 4, Jane's conversation partner asked whether she liked beer. In (23), Jane was able to produce *tidak* 'not', but only in a one-word answer.

(22) K: Suka bir?
like beer
'[Do you] like beer?'

(23) Tidak.
not
'No.'

(Jw4s105)

At this point, I conclude that Jane is at stage 1 of development for verbal negation. She has not yet analysed the verbal negation rule in her IL system.

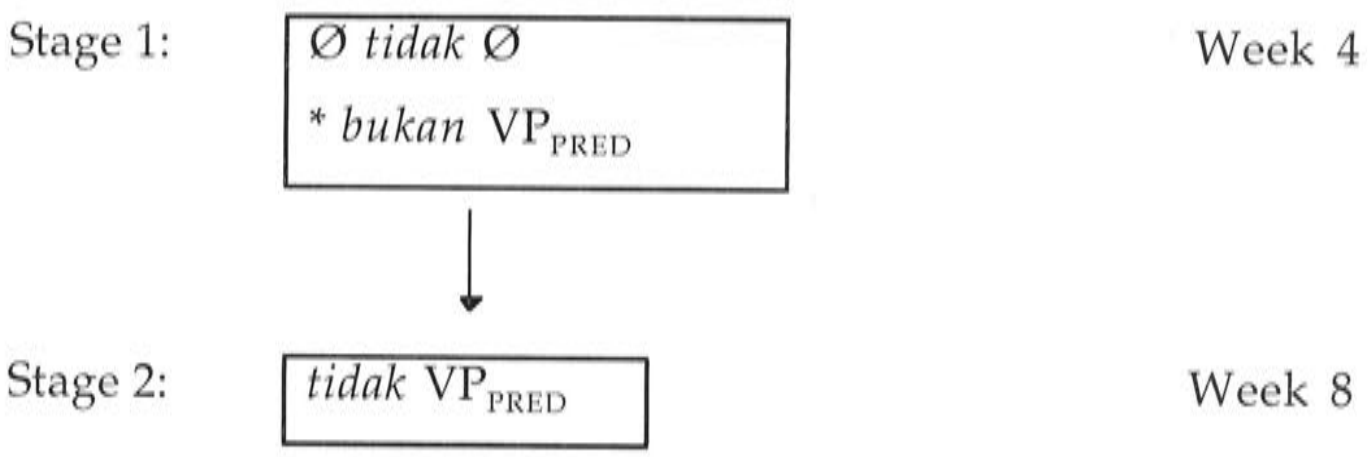
By contrast, in week 8, Jane has certainly developed to stage 2 for verbal negation, and thus has acquired this structure. Out of 11 possible contexts, she fulfils 9; her utterances are coherent with the topic of conversation and they do not appear to be repertoire. Jane's frequent positioning of *tidak* before the main verb in week 8 (24), is evidence that she can identify the position of the negator *tidak*:

(24) Saya vegetarian. Saya tidak makan daging.
1Psg vegetarian 1Psg not eat meat
'I am a vegetarian. I do not eat meat.'

(Jw8s85)

It is very intereresting to see how her verbal negation system has changed during this four week period. In week 4, Jane's IL for verbal negation is **bukan* + VP_{PRED}; four weeks later, she has changed the form into *tidak* + $VP_{PRED.}$ Diagram 4.2 shows the changes in Jane's language production from stage 1 to stage 2.

Diagram 4.2: The Changes of Jane's Language Production from Week 4 to Week 8



Because she uses *tidak* correctly in 9 out of 11 contexts, Jane is said to have acquired verbal negation in week 8. After she acquires verbal negation, she continues to produce error free applications of verbal negation (except for one error in week 15) until the end of the data collection. On the whole, Jane's performance of verbal negation is very consistent: she made 4 errors out of 271 utterances between week 4 and week 68. This indicates that, for Jane, the verbal negation rule is very stable.

4.2.2.2.1 The Acquisition of Verbal Negation with Auxiliary: Jane

In contrast, the picture of Jane's acquisition for verbal negation using auxiliaries is quite hard to assess. The data in Table 4.6 show that Jane starts to produce examples of applying *tidak* + aux + VP_{PRED} at the same time as she acquires verbal negation without an auxiliary, in week 8. However, I do not regard verbal negation with auxiliary as acquired until week 33. The main reason for this is that, after analysing the data carefully, I conclude that Jane does not fulfil the acquisition criteria of using lexically varied and spontaneous utterances, as detailed in Chapter Two. To demonstrate this more clearly, I have included a third column in Table 4.6, which shows how many different lexical items Jane uses for her utterances.

In most cases, Jane uses only 1 or 2 different lexical items for her utterances, and thus does not fulfil the criterion of using three different lexical items. In weeks 15 and 27, she does use three different lexical items; however, I am still not convinced that acquisition has taken place at this point, because most of Jane's production in these weeks can be traced to forms which have been taught as part of class substitution drills, and therefore should be classed as repertoire. I describe Jane's production in these weeks in detail below.

In Table 4.6 below, the first column shows the number of tokens produced by Jane, while the third column shows the number of different types of lexical items produced. For example, in week 16 Jane produced 6 tokens (in the first column) but only 2 types of lexical item. In weeks 15 and 27, there are 3 types, but I have used the designation 'rp' to indicate that they are repertoire or stock phrases.

Table 4.6 The Acquisition of Verbal Negation with Auxiliary : Jane

	tidak + aux + VP_{PRED}		
Week	**Rule Applied/ Contexts**	**Proportion**	**Type**
1			
2			
4			
8	4/4	1	1 rp
9	[1/1]	[1]	1
11	[2/2]	[1]	2
12	[2/2]	[1]	2
13	[1/1]	[1]	1
15	5/5	1	3 rp
16	6/6	1	2 lx
17	[2/2]	[1]	2
21	[1/1]	[1]	1
24	[1/1]	[1]	1
27	6/6	1	3 rp
30	4/4	1	1
33	5/5	1	3
37	3/3	1	3
39			
41	3/3	1	3
45	[1/1]	[1]	1
51	7/7	1	3
53	[2/2]	[1]	2
68	3/3	1	3

Key

lx : denotes lexical item
rp : denotes repertoire
[..] : insufficent contexts to judge acquisition
n/n : rule applications/ possible contexts
shaded cell: acquisition point

In week 8, the first impression is that Jane has acquired verbal negation using auxiliary. She produces 4 occurrences, and correctly applies the rule. However, looking closely at her production she actually only uses one type of auxiliary, *suka* 'like'; furthermore, her construction appears to be similar to the pattern drills in the class, into which she substitutes one or two elements. For example, (25) resembles the class drill where Jane changes the NP_{SUBJ} from *saya* 'I' (in the class drill) into *anak perempuan* 'daughter' (in the interview). For these reasons, I do not believe that *tidak* + aux + VP_{PRED} can be considered acquired at this point of time.

(25) Anak perempuan tidak suka pergi Eropa.
child female not like go Europe
'My daughter does not like going to Europe.'

(Jw8s155)

Jane's production in weeks 9, 11, 12 and 13 is almost identical to week 8. She uses exactly the same core sentence structure ... *tidak* aux *pergi* ..., only manipulating the subject, auxiliary and verbal complement elements. The auxiliaries used are confined to *tidak suka* 'not like', *tidak mau* 'not want' and *tidak bisa* 'may not', all of which were practised as part of the textbook substitution drills. In other words, there is a low degree of lexical variation in Jane's production - a condition which Pienemann (1998:128) states facilitates "chunk learning". This is confirmed by a detailed analysis of Jane's production at this time, showing that she is reproducing sentences reproduced from pattern drills.

Before I discuss the point where Jane is considered to have acquired verbal negation using the auxiliary, I would like to discuss her production in weeks 15, 16 and 27. In the first column of Table 4.6, it appears that in week 15, 16 and 27, Jane applied the rule in sufficent contexts to be considered acquired: 5 out of 5 (week 15) and 6 out of 6 (both week 16 and week 27). However, in the third column I marked these as 3 rp (repertoire) for week 15 and week 27,

and 2 lx (lexical items) for week 16. Thus, the three forms in weeks 15 and 27 appear to be repertoire - Jane continues to use only the forms *tidak mau* 'not want', *tidak suka* 'not like' and *tidak bisa* 'may not' that are drilled in the textbook - so I cannot state that acquisition has occurred, because Jane had not met the acquisition criteria. In week 16 she uses only two different phrases - *tidak mau makan* 'not want to eat' and *tidak mau pergi* 'not want to go' - and then manipulates the element of the subject or verbal complement.

I consider that Jane has acquired verbal negation using auxiliary by week 33. The first column of Table 4.5 (in week 33) shows that she produced 5 tokens of verbal negation using an auxiliary, with 3 different types of auxiliary. Looking closely at her production, there is now evidence that Jane is using spontaneous expressions that are not repertoire. As well as being spontaneous, her expressions are appropriate to the topic of the conversation. For example in (26), Jane produces a very complex sentence, using the complementiser *bahwa* 'that', including the usage of verbal negation with the auxiliary *tidak harus ada* 'not must have'.[11] This is different from her previous usage of auxiliaries like *mau* 'want', or *bisa* 'can', which are often used in the class drills. But *tidak harus* 'not must' was not included in these drills, and must therefore be Jane's own construction.

(26) Saya tidak bisa mengira bahwa mereka *tidak harus ada* kedudukan itu.
1Psg not can estimate that 3Ppl not must have position DET
'I do not think that they should not have the positions.'
(Jw33s8)

This is strong evidence that Jane has analysed verbal negation using auxiliary. Although Jane continues to use *tidak mau*, *tidak bisa* and *tidak*

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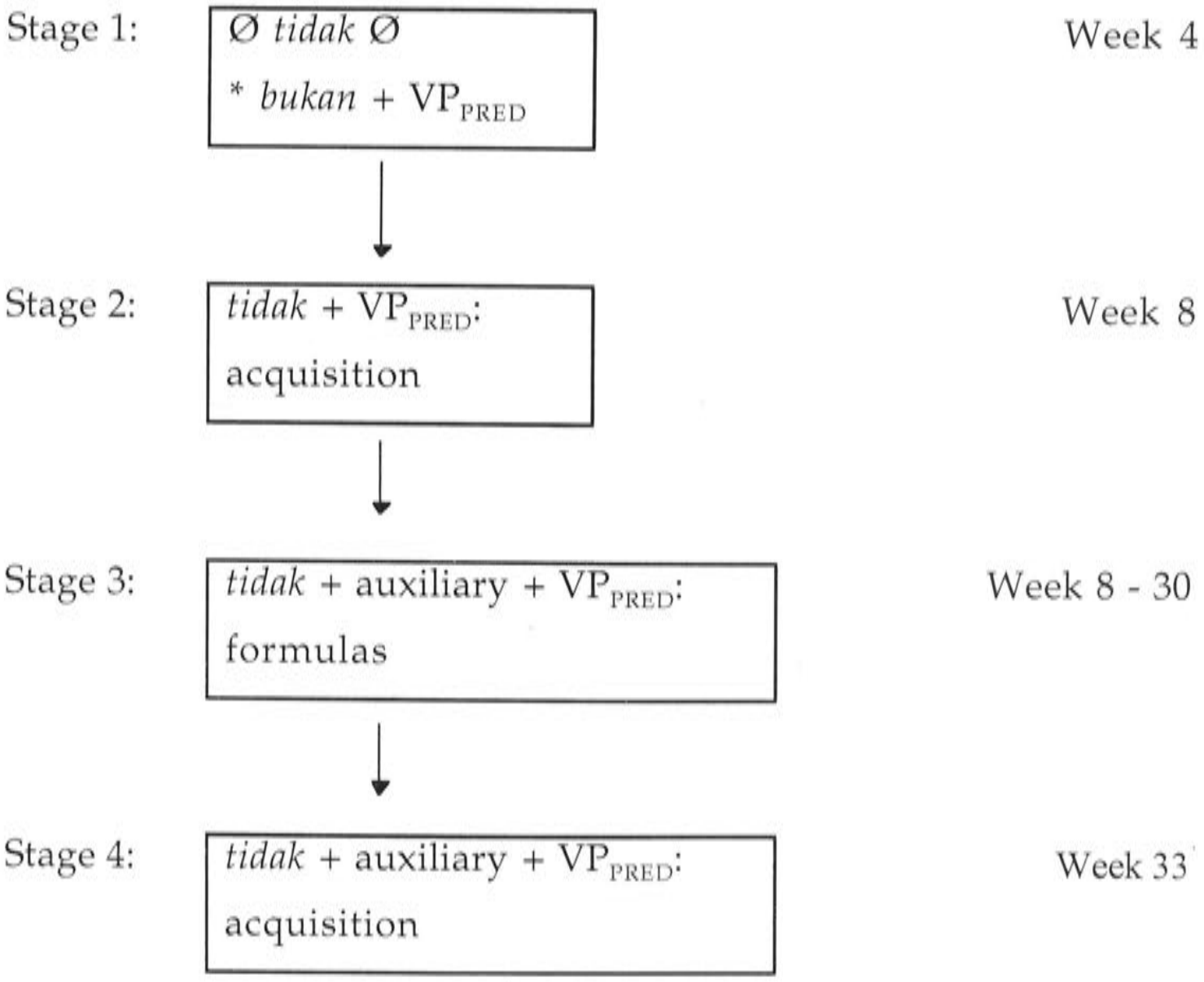
[11] The verb *ada* 'to have, there is, there are' is treated as a main verb in the TL, so *tidak harus ada* is translated as 'not must have', but it should be noted that the word 'have' here is not an aspectual marker like in English 'should have gone'.

suka, she has shown that she can construct phrases containing *tidak* + aux + VP_{PRED} using her own language resources, and is not simply producing repertoire. It can therefore be assumed that *tidak mau*, *tidak bisa* and *tidak suka* are now also analysed. The important point here is not the structures themselves, but whether or not they are analysed. I consider that in week 33 there is sufficient evidence that they are.

After acquiring verbal negation with auxiliary in week 33, Jane continues to retain and apply her established rule for verbal negation using auxiliary in the right contexts until the end of the data collection in week 68.

To summarise, Diagram 4.3 shows the stages that Jane undertakes prior to her acquisition of verbal negation:

Diagram 4.3: The Development Stages of Verbal Negation: Jane



At first, Jane uses both *tidak* and the incorrect negator *bukan* for verbal negation. At this stage, her IL for negation includes both Ø *tidak* Ø and **bukan* + VP_{PRED} (stage 1). Following this, Jane can appropriately apply the negator for verbal negation, using *tidak*. Her IL has developed so that she is able to identify the predicate category: because the predicate category is VP_{PRED}, she applies *tidak* +VP_{PRED}. At this point, her general verbal negation can be classed as acquired (stage 2). At the third stage, Jane uses an auxiliary after the negator *tidak*, but the structure is probably an unanalysed chunk (stage 3). Finally, Jane's use of verbal negation with auxiliary is analysed, and therefore it is classed as acquired (stage 4).

4.2.2.3 The Acquisition of Verbal Negation: Kate

Kate acquires verbal negation in week 8 (at the same time as Jane). Table 4.7 shows that, once the structure is acquired, the majority of Kate's productions of verbal negation are correct. From week 17, she does not produce any errors. From week 8 to week 16 Kate produces some errors but her correct applications exceed the incorrect ones, so the evidence shows that her acquisition of verbal negation is genuine, and she has worked out the verbal negation system in her IL.

Table 4.7 presents the acquisition of verbal negation in the form

S ---> NP_{SUBJ} + *tidak* + VP_{PRED}

Table 4.7: The Acquisition of Verbal Negation: Kate

tidak + VP_{PRED}		
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4	[0/1]	[0]
8	12/13	0.92
9	5/8	0.62
11	4/5	0.8
12	6/10	0.6
13	10/12	0.83
15	14/17	0.82
16	10/11	0.91
17	12/12	1
21	6/6	1
24	9/9	1
27	7/7	1
30	9/9	1
33	4/4	1
37	5/5	1
39	4/4	1
41	13/13	1
45	5/5	1
51	9/9	1
53	16/16	1
68	11/11	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Kate's production in week 4 is very similar to Jane's, in that the single context for verbal negation results in an inappropriate application of the rule. At this point, I consider that Kate is still at stage 1 in the development of verbal negation (and thus has not acquired verbal negation). It appears that Kate is 'in the process of working out the rule' in her IL, both with regard to the negation type and the positioning of the negator (28).

(27) J: Apa ada mesin tulis di kantor Ibu?
Q have machine write at office Madam
'Is there a typewriter in the Madam's (teacher's) office?

(28) * Oh (...) bukan (...). Ibu ada bukan mesin tulis.
oh not madam have not machine write
'Oh (...) no (...). Madam (teacher) does not have a typewriter.'
(Kw4s39)

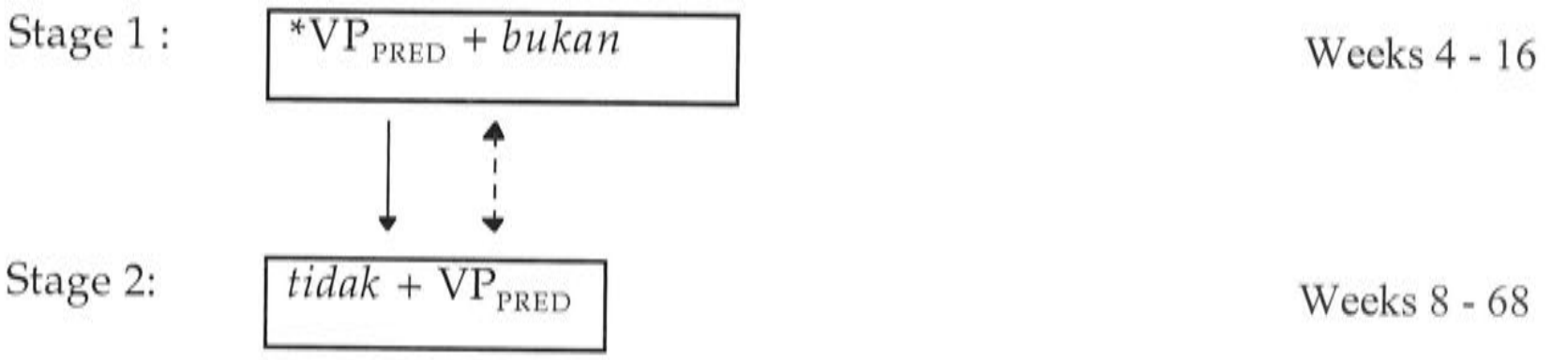
This utterance shows that Kate is at stage 1 of her development, owing to the incorrect word order (* VP_{PRED} + negator instead of negator + VP_{PRED}) and inappropriate negator (**bukan* instead of *tidak*). The expected answer in (28) would be *Tidak ada mesin tulis* 'There is not a typewriter.' However, Kate's utterance suggests that she may be able to detect the grammatical categories of nouns and verbs, and that she may also be aware that *bukan* is used to negate a noun or noun phrase; because she places the negator *bukan* before the noun phrase in this utterance. At this point, Kate appears to be attempting to work out the rules for negation in Indonesian.

In week 8, Kate shows that she can apply the negative rule to a verbal phrase appropriately, and she applies it in 12 out of 13 occurrences. For example, in (29), Kate's utterance is spontaneous and her remark is coherent with the topic of the conversation. Kate told her conversation partner that, when she lived in Germany, she did not drink water from the tap because it was too alkaline.

(29) Kita tidak minum air dari tap, ada banyak alkaline.
1Ppl-INCL not drink water from tap, have many alkaline
'We did not drink water from the tap, it was too alkaline.'
(Kw8s112)

Thus, week 8 marks Kate's acquisition of verbal negation: she fulfils the criteria set out in this study, using at least 2 out of 3 correct rule applications, the utterances are spontaneous, and she uses varied vocabulary. Like Jane's, Kate's IL grammar changes in form during the four weeks from week 4 to week 8. Diagram 4.2 shows Kate's stages of IL grammar for verbal negation.

Diagram 4.4: The Changes in Kate's Language Production from Week 4 to Week 8



One interesting structure that occurs during Kate's early development is the use of *VP_{PRED} + *bukan* (*ada* + *bukan*) between week 4 and week 16, instead of *tidak* + VP_{PRED} (*tidak* + *ada*). Kate employs the former structure frequently, unlike Jane and Matt, who only use this structure once each (Jane week 15 and Matt week 24).[12] While she is using the inappropriate negator, the use of this structure indicates that Kate is aware of the different negators *tidak* and *bukan*, and that she may be aware of the use of *bukan* to negate noun (phrases), as in (28).

[12] There are insufficient examples in Jane's and Matt's production to determine whether this structure is used systematically, so I have treated them as isolated cases.

After acquisition, Kate continues to use the form *tidak* + VP_{PRED} in a variety of contexts and with varied vocabulary. Unlike Matt who gives priority to his communication needs, Kate appears to be cautious with her production. Although her utterances do become more complex and varied as her IL develops, it is noticeable that she tends to use phrases that she is sure she can produce correctly and, as a result, she repeats certain sentences.

It is worth noting that the overall frequency of errors is relatively low: Kate has only 16 errors out of 187 utterances between weeks 4 and 68, so more than 91% of her applications of verbal negation are correct. Thus she acquires verbal negation early and she retains it for the whole period of the interviews.

4.2.2.3.1 The Acquisition of Verbal Negation with Auxiliary: Kate

Verbal negation with auxiliary is acquired later than general verbal negation by all the learners. Table 4.8 shows that Kate does not produce many examples of verbal negation with auxiliary. Her first attempt is in week 8, and she continues to produce negation with the auxiliary several times in the ensuing weeks, before she acquires it in week 30.

Table 4.8 The Acquisition of Verbal Negation with Auxiliary: Kate

	tidak + *aux* +VP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8	[2/2]	[1]
9		
11		
12		
13	[1/1]	[1]
15	[2/2]	[1]
16	[2/2]	[1]
17		
21	[2/2]	[1]
24		
27	[1/1]	[1]
30	4/4	1
33		
37		
39		
41		
45		
51	[2/2]	[1]
53	[1/1]	[1]
68		

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In week 8, when Kate first produces verbal negation using an auxiliary, she produces the construction twice. Looked at closely, her production is possibly still repertoire from the class drill, because her utterances were somewhat out of context. For example in (30), after talking about their children's activities to her conversation partner, Kate suddenly said that she did not like writing an essay. It may have been that she was practising a substitution drill from the class, changing the form from positive into negative sentences and vice versa.

(30) Saya tidak suka menulis essay.
1Psg not like write essay
'I do not like writing an essay.'

(Kw8s56)

Week 30 is when I consider that Kate has acquired verbal negation with auxiliary. She produces four correct examples in four available contexts, she uses a variety of lexical items for the auxiliary, and her usage is distinct from the previous weeks. In particular, in (31) she applies *tidak harus* 'not must': because the auxiliary *harus* 'must' was not in the target drills, it is unlikely that Kate is using repertoire. Kate's usage here is spontaneous and contextually proper, and I consider that this shows she has analysed the verbal negation with auxiliary. In a role-play she told her interlocutor that she did not have to give marks to her if her assignment was submitted late.

(31) Saya tidak harus memberikan nilai, kalau Anda terlambat.
1Psg not must give mark if 2Psg late
'I do not have to give marks, if you are late.'

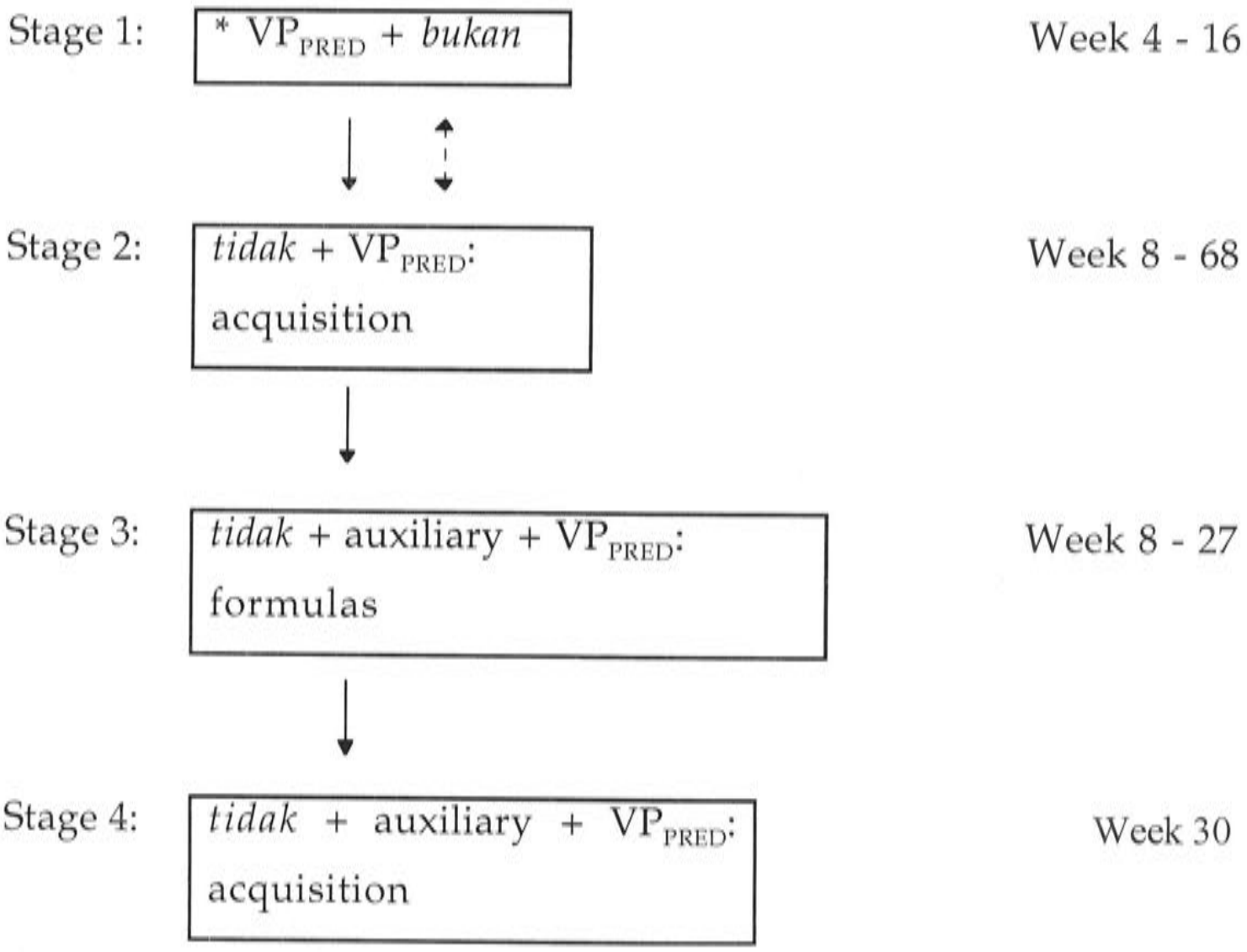
(Kw30s220)

After her acquisition, Kate did not produce many examples of verbal negation with auxiliaries; she produced again only in weeks 51 and 53. Because the data collection was natural, Kate was not required to use verbal

negation with an auxiliary. There is no evidence in the data of Kate using avoidance strategy subsequent to her acquisition. Although there is little evidence for her performance post-acquisition, Kate does not appear to have difficulty in applying the rule correctly.

To summarise, Kate, like Matt and Jane, goes through several stages on her route to acquisition of verbal negation. The changes reflect the grammar of her IL at a time, as shown in Diagram 4.5 below:

Diagram 4.5: The Development Stages of Verbal Negation: Kate



At the outset, Kate uses the incorrect word order *VP_{PRED} + negator instead of negator + VP_{PRED} and also the incorrect negator **bukan* (nominal negator) instead of *tidak* (verbal negator) (stage 1). Next, Kate applies the appropriate negator for verbal negation by using *tidak*. It is possible that she has been able to identify the predicate category in her IL, therefore she applies *tidak* +VP_{PRED} (stage 2). Thirdly, Kate uses an auxiliary after the negator *tidak*, but

the structure is probably unanalysed at this point (stage 3). Finally, Kate is able to analyse and use verbal negation with an auxiliary (stage 4).

4.2.2.4 The Acquisition of Verbal Negation: Summary

The evidence has shown that all the learners have similar paths in acquiring verbal negation, with or without auxiliary. The data reveal that, although Matt has the advantage of earlier formal input, it is still possible to see some traces of his early verbal forms (e.g. ∅ *tidak* ∅ and **bukan* + VP_{PRED}). It is interesting to see at stage 1 that the learners are still in the process of working out the TL grammar using their own IL grammar; as a result they produce single word utterances using ∅ *tidak* ∅ and non-target learner rules such as **bukan* + VP_{PRED} for Matt and Jane, and *VP_{PRED} + *bukan* for Kate (see Table 4.9).

Table 4.9 below sets out the timing of the learners' development. The negation structures that are typical of each stage of the learners' development are set out in four rows and for each stage I have shown the weeks when the learners produced examples of that form. Some of the productions overlap in terms of timing, because the learners produced more than one form within the same week: for example, in week 4 Matt produced forms typical of stages 1, 2 and 3. Also, Kate produces the stage 1 structure *VP_{PRED} + *bukan* a total of 10 times spanning weeks 8 to 16. Both these examples show that the dividing line between the stages is not necessarily distinct, but structures from earlier stages do eventually give way to structures from the later stages of development.

Table 4.9: The Development Stages of Verbal Negation by Week: Matt, Jane and Kate

	Production	Matt	Jane	Kate
Stage 1	Ø tidak Ø (M, J) * *bukan* VP_{PRED} (M, J) *VP_{PRED} *bukan* (K)	week 2, week 4	week 4	week 4 wk 8 -16
Stage 2	*tidak* VP_{PRED}: acquisition	week 2, 4	week 8	week 8
Stage 3	*tidak* aux VP_{PRED}: formulas	week 4, 13	week 8 - 30	week 8, 13 - 27
Stage 4	*tidak* aux VP_{PRED}: acquisition	week 30	week 33	week 30

It is interesting to see that verbal negation with an auxiliary is acquired much later than verbal negation without auxiliary for the three learners. Although the auxiliary was studied at the same time as the main verbs, in week 2 (chapter three of the textbook), the acquisition times are considerably later. The learners begin to produce verbal negation with auxiliary at the same time as negation with main verbs, but at the start there is not sufficient evidence that the structure with the auxiliary has been acquired. This is because most of the early production consists of formulas.

It may be possible to explain the late acquisition with reference to Clahsen's (1984) initialisation and finalisation strategy (IFS and FIL) strategy. Clahsen (1984:222) asserts that in order to insert an 'X' into a sentence string learners must be able to identify where to position the 'X'. In other words, they must be able to identify the grammatical category. It would also be relevant to consider Pienemann's (1984, 1987, 1988) Teachability Hypothesis and

Processability Theory (1998). If a learner is not ready to acquire or develop a particular structure in his or her IL, in this case negation with an auxiliary, teaching the feature will not be effective. This is a significant consideration, which will be discussed in the section on input and output in Chapter Six. It is important to consider a learner's 'readiness' for a particular stage, in particular when designing a teaching syllabus for the language.

4.2.3 The Acquisition of Adjectival Negation: An Overview

Analysis of the data from all three learners shows that adjectival negation is acquired later than verbal negation. Table 4.10 shows that all three learners acquire adjectival negation using the form S ---> NP_{SUBJ} + *tidak* + AP_{PRED} at about the same time, several weeks after they acquired verbal negation. Jane and Kate acquired it in week 15, followed by Matt in week 17. Although this structure is not acquired as early as verbal negation, all the learners show 100% accuracy at the point of acquisition.

It is interesting to see that, in all cases, acquisition is preceded by a period when the learners use adjectival negation, but the frequency is not sufficient to consider this structure to be acquired. The interview data during this period show that the learners use repertoire learned from class or textbooks, with no evidence that they can extend the rule to other contexts. For example, in week 8, Kate produces *tidak baik* 'not good' and *tidak bagus* 'not good': these are correct structures, but it is likely that they are simply learned phrases from the textbook. I will discuss individual paths of acquisition in more detail in the later sections.

Table 4.10: The Accuracy Rates at the Time of Acquisition for Adjectival Negation: Matt, Jane and Kate

	Matt	Jane	Kate
Week	17	15	15
Percentage	100%	100%	100%

Table 4.10 shows that the learners' accuracy at the time of acquisition was very high - all of them were able to produce the structure with 100% accuracy. It is also worth noting that, once Jane and Kate acquired adjectival negation, they continued to use the structure with 100% accuracy for the remainder of the interview period, whereas Matt continued to have errors even after acquisition. This pattern is similar to what I observed for their verbal negation, and I will discuss this issue in more detail later.

4.2.3.1 The Acquisition of Adjectival Negation: Matt

Matt's acquisition of adjectival negation is later than his acquisition of verbal negation, and the number of occurrences of adjectival negation is lower. In Table 4.11, it can be seen that Matt initially used adjectival negation in week 2, and then in weeks 8, 11, 13, 15 and 16. However, he has not yet met the acquisition criteria adopted in this study. To be consistent with the acquisition criteria, the learner must produce the structure in at least 2 out of 3 contexts, using analysed grammar rather than repertoire; so, in this case, Matt is not considered to have acquired the adjectival negation structure until week 17.

Table 4.11 The Acquisition of Adjectival Negation: Matt

	tidak + AP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	[2/2]	[1]
4		
8	[2/2]	[1]
9		
11	[2/2]	[1]
12		
13	[1/2]	[0.5]
15	[2/2]	[1]
16	[1/1]	[1]
17	3/3	1
21		
24		
27	2/4	0.5
30		
33	6/7	0.86
37	[0/1]	[0]
39		
41	3/3	1
45	[1/1]	[1]
51		
53	[1]	[1]
68	3/3	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

The following discussion outlines Matt's path prior to his acquisition in week 17. In week 2, Matt uses one word answers for adjectival negation. In both occurrences in this week his responses consist of one word, *tidak* 'not'. For example, when the interviewer asks whether the Commodore is a new car (32), the response is (33):

(32) Iw: Apa-kah mobil Commodore baru?
Q-marker car Commodore new
'Is the Commodore a new car?'

(33) Er tidak er.
er not er
'Er not er.'

(Mw2s44)

In this case, Matt is expected to answer using at least *tidak baru* 'not new'. Matt's answer is not incorrect, at least in informal Indonesian. However, the input provided in the course was only the formal Indonesian form, *tidak* + AP_{PRED}. It is possible that Matt's IL grammar for adjectival negation has not yet developed the full, formal, structure, so he still produces ∅ *tidak* ∅.

Matt's production from week 8 to week 13 does not provide sufficient evidence that he has acquired adjectival negation: there are only one or two examples in each week. Also, it is likely that his utterances are not analysed: he produces either *tidak baik* 'not good' or *tidak bagus* 'not good', both of which are presented as models in the textbook. However, the use of formulas demonstrate that his IL for adjectival negation has developed to stage 2, as shown by the week 8 example (34).

(34) Itu tidak bagus.
det not good
'It is not good.'

(Mw8s30)

Matt's sentence pattern in week 11 is similar to those in week 8, although this time he can produce a longer sentence. However, he is still using stock phrases, in this case (35) *tidak bagus*:

(35) Kami bermain tenis banyak tetapi saya tidak bagus.
3Ppl play tennis much but 1Psg not good
'We play tennis a lot but I am not good.'

(Mw11s141)

Matt's use of *tidak bagus* 'not good' is appropriate to the context and does convey his meaning; but there is no clear evidence yet whether the structure is analysed.

In week 15 and week 16, Matt's IL appears to have developed to stage 3, that is, his adjectival negation production seems to be analysed, but there are still not enough occurrences to be certain that it is acquired. This is therefore categorised as onset. He starts to produce other forms of *tidak* + AP_{PRED}, such as *tidak pintar* 'not clever' (36) in week 15 and *tidak lapar* 'not hungry' (37) in week 16. In weeks 15 and 16, his usage of *tidak* + AP_{PRED} is contextually appropriate, and his remarks are his own constructions.

(36) Saya tidak pintar.
1Psg not clever
'I am not clever.'

(Mw15s25)

(37) Saya tidak lapar.
1Psg not hungry
'I am not hungry.'

(Mw16s1)

In week 17 Matt spontaneously produces 3 correct utterances out of 3 contexts. Since he is also able to use a variety of lexical items, such as *tidak mahal* 'not expensive' (38), *tidak gila* 'not mad' (39) , and *tidak pandai* 'not clever' (39), week 17 can be considered the point at which he develops to stage 4; that is the acquisition of negative adjectival phrases, according to the criteria used in this study. For example, in (38) and (39), during a bargaining role-play, Matt tried to persuade his customer to buy his goods. Matt convinced him that the goods are not expensive (38), then he tried to show his anger to the customer who bargained too low (39).

(38) Barang-barang saya tidak mahal.
good good 1Psg not expensive
'My goods are not expensive.'

(Mw17s3)

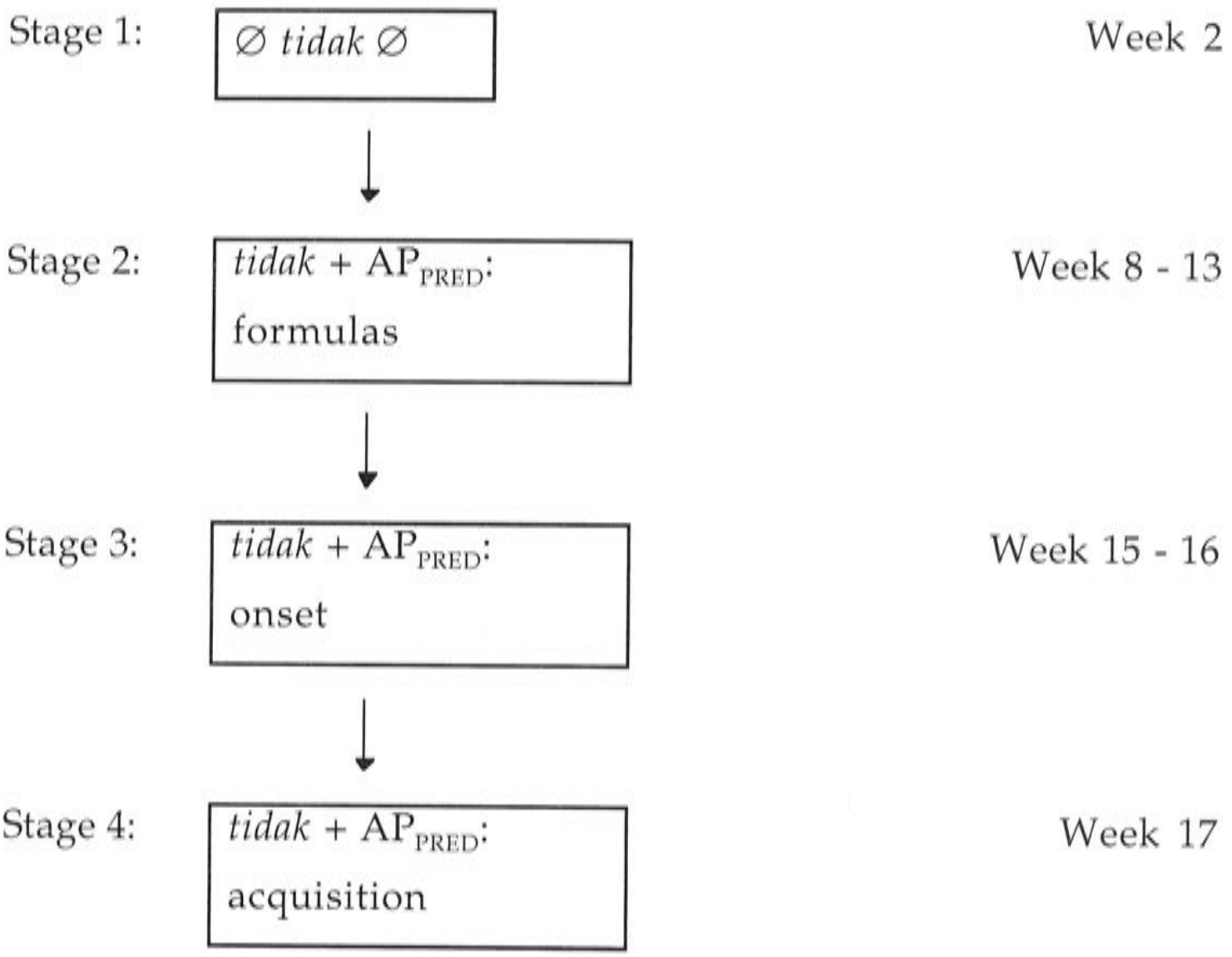
(39) Tuan tidak gila er tidak pandai.
sir not mad er not clever
'Sir, you are not mad er you are not clever.'

(Mw17s67)

From week 17 to week 68 Matt produced the appropriate rule for adjectival negation with ease whenever the contexts were provided (see Table 4.11), although he occasionally produced the incorrect form (for example, in weeks 27, 33 and 37). Matt, therefore, continues to have a number of errors after acquisition. This is a similar pattern to his verbal negation.

To summarise, Matt's production changes as his IL develops. This development is characterised by four stages on his path to acquiring adjectival negation. Diagram 4.6 shows these stages.

Diagram 4.6 The Development Stages of Adjectival Negation: Matt



Matt's IL grammar for adjectival negation appears initially as ∅ *tidak* ∅ (stage 1); this changes to the form *tidak* + AP_{PRED} (stage 2), although his production is unanalysed, and at this point he appears to be using repertoire from the class drills. At the next stage, Matt continues to use *tidak* + AP_{PRED}, but now there is some evidence that the structure is analysed. This is the onset of his application of the rule (stage 3). Finally, Matt has acquired the form *tidak* + AP_{PRED} (stage 4).

4.2.3.2 The Acquisition of Adjectival Negation: Jane

Jane, like Matt, acquires adjectival negation later than verbal negation. Table 4.12 shows that the first time Jane produces adjectival negation is in week 11. She produces it again in weeks 12 and 13, although the occurrences in these weeks are not sufficient to determine acquisition based on the criteria adopted in this study.

Initially, in week 11, Jane is at stage 1 of her development, using ∅ *tidak* ∅, instead of *tidak* + AP_{PRED}. In (41), when Jane was asked whether her daughter was sick (40), the expected answer would be at least *tidak sakit* 'not sick'. At this point Jane, like Matt, may use *tidak* 'not' as an all-purpose negator. Jane's IL grammar is still at the single word stage, producing ∅ *tidak* ∅.

(40) K: Apa anak perempuan kamu sakit?
Q child female 2Psg sick
'Is your daughter sick?'

(41) Uhm tidak.
uhm not
'Uhm not.'
(Jw11s17)

Table 4.12 The Acquisition of Adjectival Negation: Jane

	tidak + AP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9		
11	[1/2]	[0.5]
12	[2/2]	[1]
13	[1/1]	[1]
15	6/6	1
16	[1/1]	[1]
17		
21	5/5	1
24	3/3	1
27	[2/2]	[1]
30		
33	11/11	1
37	3/3	1
39	5/5	1
41	4/4	1
45		
51	3/3	1
53		
68		

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Jane's IL appears to develop in week 12. Similar to Matt, it seems Jane is using the repertoire phrases *tidak baik* and *tidak bagus* 'not good' at this point, so this constitutes stage 2 of her development. For example, in (42) Jane told her partner that her son's picture was not good and he did not like the teacher. There appears to be no connection between his bad picture and his dislike of the teacher. It is the fact that Jane's utterance does not fit in easily with the topic of conversation that shows the structure is likely to be unanalysed ((42), (43)):

(42) Tetapi gambar uhm gambar tidak baik. Dia tidak suka guru.
but picture uhm picture not good. 3Psg not like teacher
'But the picture is not good. He does not like the teacher.'
(Jw12s85)

(43) Tatkala dia menggambar tidak baik.
When 3Psg draw not good
'When he drew the picture it was not good.'
(Jw12s87)

It is rather hard to determine at what point Jane makes the transition to stage 3, using analysed utterances, because there are few data between week 12 and her acquisition in week 15. However, it cannot be assumed that she has been able to skip this stage, it is possible simply that there were not sufficient contexts available, so stage 3 is not evident in the data. Jane's development of adjectival negation covers a much shorter period than that of her two companions; in fact she appears to develop through the four stages in 4 weeks. Given that the development is compressed, a gap in the data would be unsurprising; possibly Jane's development through stage 3 occurred in the period between two interviews.

I would like to examine Jane's week 13 production of *tidak bagus* 'not good' more closely. As was discussed previously, Jane's usage of *tidak baik* 'not good' in week 12 was out of context, and I concluded that Jane was

reproducing a stock phrase copied from a textbook drill. Her use of *tidak bagus* 'not good' in week 13 also appears at first sight to be repertoire. However, an examination of the context reveals a difference: Jane and her conversation partner were discussing how some parts of Indonesian grammar are easy and others are confusing. In week 13 (44) Jane told her conversation partner that she had not studied chapter eight of the Indonesian textbook, and she commented that chapter eight was not good. Jane usage of *tidak bagus* 'not good' here is coherent with the topic of the conversation, and Jane's comment was justifiable because chapter eight covers transitivity in Indonesian, which was not easy for the students to comprehend.

(44) Bab delapan tidak bagus.
chapter eight not good
'Chapter eight was not good.'

(Jw13s25)

Thus, although Jane's production in week 13 is very similar to that in week 12, they differ contextually. I therefore concluded that the week 13 production may in fact mark a development in Jane's IL, even though it appears that her production is of the same form as the previously unanalysed utterances. Of course, it is not possible to draw a definite conclusion from a single occurrence. I have treated this as a special case: there are not many data for adjectival negation and Jane's development occurs over quite a short period, but I believe my careful analysis of Jane's production does provide some evidence, even though it is highly speculative, for the development of her IL.

By week 15, Jane has acquired adjectival negation. At this point, she is able spontaneously to produce 6 different lexical variations including *tidak betul*

'not right' (46), *tidak happy* 'not happy' (47), *tidak green* 'not green' (48),[13] showing that she is able to apply the structure to a variety of situations. Jane continues to produce *tidak baik* 'not good' (45) and *tidak bagus* 'not good' (49), but she is now able to produce other adjectives in combination with *tidak*. This suggests that her usage of *tidak baik* and *tidak bagus* would also be analysed. The examples in ((45), (46), (47), (48) and (49)) give a clear picture that her adjectival negation rule application is analysed, and they are contextually appropriate.

(45) Saya masih uhm (...) ujian tidak baik.
1Psg still uhm exam not good
'I am still uhm (...) the exam was not good.'

(Jw15s12)

(46) Masalah itu tidak betul.
matter DET not right
'The matter is not right.'

(Jw15s22)

(47) ... dan saya tidak happy.
... and 1Psg not happy
'and I am not happy.'

(Jw15s60)

(48) Tasmania tidak green.
Tasmania not green
'Tasmania is not green.'

(Jw15s146)

---

[13] Although Jane does not use Indonesian adjectives for 'happy' and 'green', I consider her to have acquired the adjectival rule application of the target language. 'Green' and 'happy', I believe, is a matter of lexical learning not rule application.

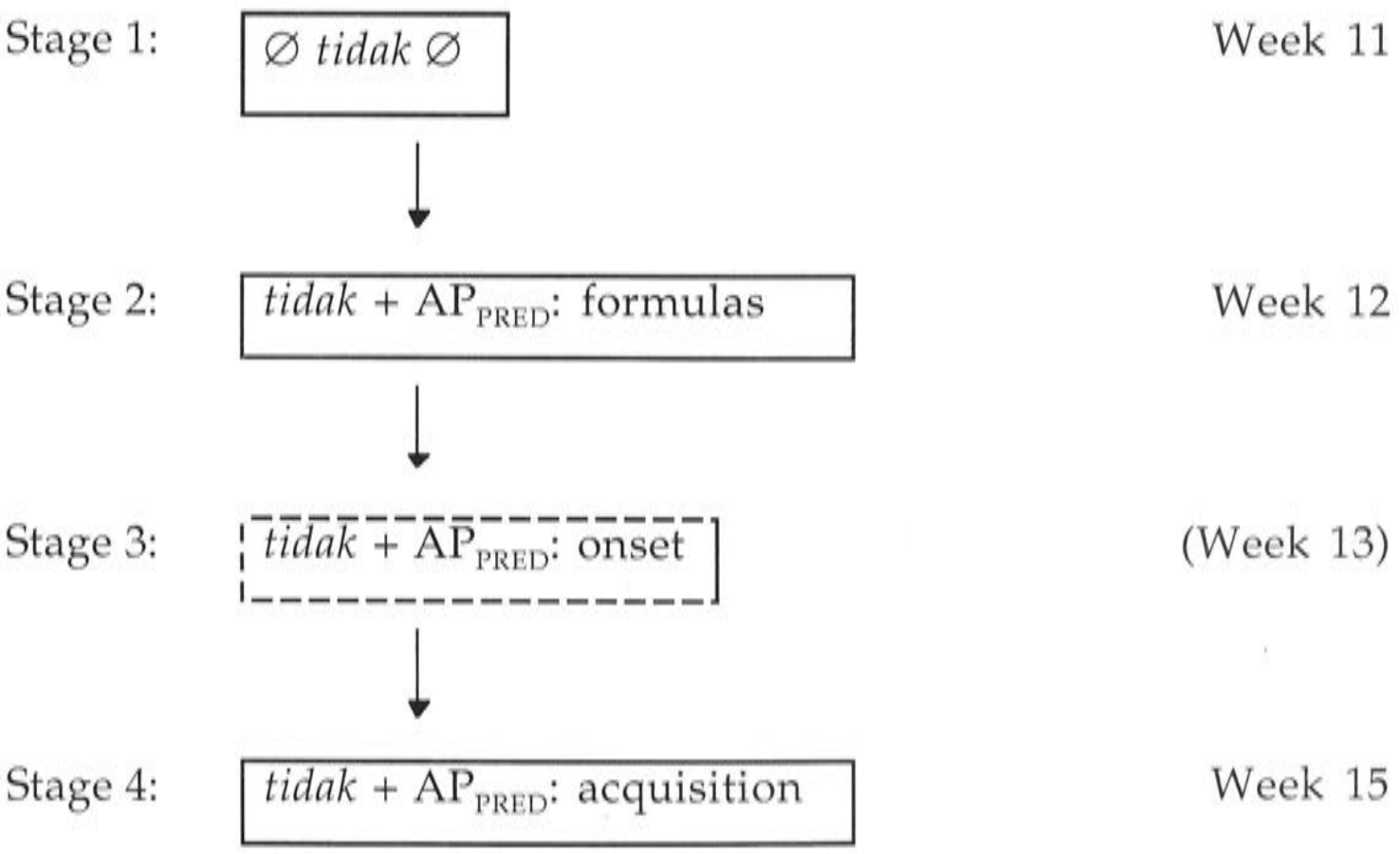
(49) Tetapi mobil itu er tidak bagus.
but car DET er not good
'But the car is not good.'

(Jw15s453)

In sentence (49) it is probable that the use of adjectival negation *tidak bagus* 'not good' is analysed, because it fits very well into the purpose of the sentence. At this point, Jane's performance on adjectival negation is *tidak* + AP_{PRED} : this places Jane at stage 4 of development.

After acquisition, Jane continued to apply the rules appropriately when the contexts allowed her to do so until the data collection ended.

Diagram 4.7: The Development Stages of Adjectival Negation: Jane



To summarise, Jane's production of adjectival negation develops in a similar sequence to Matt's. As shown in Diagram 4.7, the form of her IL grammar develops through several stages from the initial 'one word' production through to the acquisition of the adjectival negation rule in the

TL. I have shown the stage 3 structure with a dashed border because there is little evidence for this stage in Jane's data.

Initially, Jane's IL grammar consists of ∅ *tidak* ∅ (stage 1). Then she changes the form to *tidak* + AP_{PRED} (stage 2), with her production consisting of unanalysed chunks copied from class or textbook drills. In the third stage, the form is still *tidak* + AP_{PRED}, but I believe now the structure is analysed, marking Jane's onset of her application of the rule (stage 3); and finally, Jane has acquired the form *tidak* + AP_{PRED} (stage 4).

4.2.3.3 The Acquisition of Adjectival Negation: Kate

Kate, like Matt and Jane, acquires adjectival negation later than verbal negation. Table 4.13 shows that Kate initially produces adjectival negation in week 4, followed by weeks 8, 12 and 13, but the occurrences are not sufficient to determine acquisition according to the criteria used in this study. It is likely that some of her production is repertoire like *tidak bagus* 'not good' or *tidak baik* 'not good'. Although occurrences of adjectival negation are not as frequent as the occurrences of verbal negation, Kate still provides a clear indication that she has acquired adjectival negation in week 15. Week 15 is considered the acquisition point for Kate because she fulfils the criteria laid down in this study. After acquisition, Kate continues to perform the adjectival negation consistently.

Table 4.13 The Acquisition of Adjectival Negation: Kate

	tidak + AP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4	[1/1]	[1]
8	[2/2]	[1]
9		
11		
12	[2/2]	[1]
13	[1/1]	[1]
15	3/3	1
16	[2/2]	[1]
17	[2/2]	[1]
21	3/3	1
24	[2/2]	[1]
27	[1/1]	[1]
30		
33	[2/2]	[1]
37	4/4	1
39	[1/1]	[1]
41	3/3	1
45	[1/1]	[1]
51	[1/1]	[1]
53		
68	5/5	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Kate's first trial of the structure was in week 4. At this point, she is able to provide only a one word answer, *tidak* 'not' (possibly as an all-purpose negator), so it is clear that her IL for adjectival negation is still at stage 1, using the form ∅*tidak* ∅ (51):

(50) J : Jauh-kah ke rumah saya oh Anda?
far-Qmarker to house 1Psg oh 2Psg
'Is it far to my oh your house?'

(51) Uhm tidak.
uhm not
'Uhm no.'

(Kw4s20)

In this case, the expected TL form would be (at least) *tidak jauh* 'not far', but Kate does not produce this in week 4. It is interesting to note that Kate and her conversation partner are in fact rehearsing a substitution drill from the textbook that was used to practise forming questions and answers ((52), (53)):

(52) Apa-kah apotik itu jauh?
Q-marker chemist DET far
'Is the chemist far?'

(53) Apotik itu tidak jauh.
chemist DET not far
'The chemist is not far.'

(Johns 1989:65)

Given that their production is based on a textbook drill, it is not surprising that both the question by Kate's partner (52) and Kate's answer (53) are artificial and out of context. They both still have a limited range of structures

and vocabulary, and it is apparent that Kate is not yet ready to produce *tidak* + AP_{PRED}.

In week 8 it is likely that Kate's constructions *tidak baik* 'not good' and *tidak bagus* 'not good' are unanalysed. The other learners, Matt and Jane, also used these phrases as unanalysed chunks in the early stages. For example, when Kate's conversation partner was talking about how she likes Australian or American films (54), Kate replied simply *tidak bagus* 'not good' out of context (55). This remark may fit with the context of the conversation, but without other clues from Kate's production, it is not possible to tell. It is likely, at this point, that she still has not analysed the structure *tidak* + AP_{PRED}. Nevertheless, the use of formulas marks the development of her IL to stage 2 in the development of adjectival negation.

(54) J: Saya suka film. Film Australia atau film Amerika.
1Psg like film film Australia or film America
'I like films. Australian or American films.'

(55) Tidak bagus.
not good
'Not good.'

(Kw8s32)

The transition to stage 3, that is, the onset of adjectival negation, occurs in week 12. Here (57), Kate shows that she can apply the negative rule appropriately with another lexical item, apart from *tidak baik* or *tidak bagus*:

(56) J: Kebun Kate besar?
garden Kate big
'Is your garden big?'

(57) Kebun saya tidak besar sekali.
garden 1Psg not big very
'My garden is not very big.'

(Kw12s35)

Although in this case Kate is able to copy the word *besar* 'big' from her conversation partner, this should not detract from her ability to construct an adjectival negation: *tidak* + AP_{PRED}. I believe this structure is constructed from her own language resources, rather than repertoire. While the phrases *tidak baik* and *tidak bagus* were presented as models in the textbook, *tidak besar* was not. However, at this point, Kate produces only one utterance, so there is not sufficient evidence that she has acquired adjectival negation.

I consider that week 15 is the point at which Kate acquires adjectival negation: this is the first time she spontaneously uses three different adjective lexical items. All three examples produced by Kate: *tidak rusak* 'not broken', *tidak besar* 'not big' and *tidak baru* 'not new', are genuine constructions from Kate's IL - they are not repertoire, and all the phrases are used in appropriate contexts. For example: in (58) Kate told her conversation partner that, hopefully, her new computer was not going to be broken; in (59) she told her partner that she had a fig tree but it was not big; in (60) Kate remarks that she has a car but it is not new. Checking back to the topics of conversation at the time, these remarks were coherent because they were chatting about electronic goods, gardening, and cars respectively.

(58) Mudah-mudahan dia tidak rusak.
I hope that 3Psg not broken
'I hope it is not broken.'

(Kw15s264)

(59) Saya ada fig tetapi dia tidak besar.
1Psg have fig but 3Psg not big
'I have a fig (tree) but it is not big.'

(Kw15s423)

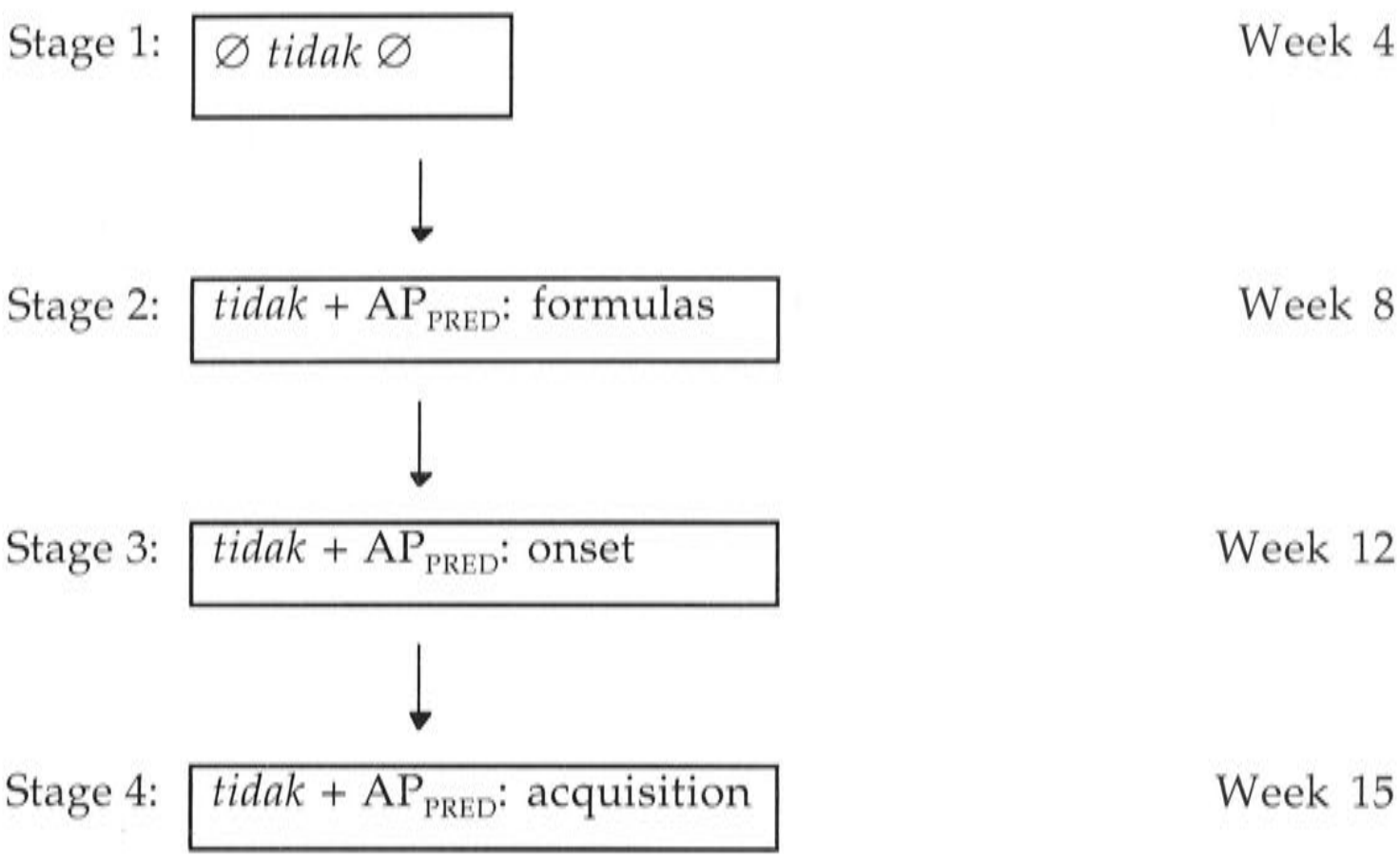
(60) ... tetapi dia tidak baru.
... but 3Psg not new
' ... but it is not new.'

(Kw15s444)

It is also noticeable that, after Kate acquired the adjectival negation rule, she continues to use the already established structures with no errors. This is a clear indication that Kate has retained the structures that she has already acquired. This is also true for her performance on verbal and adjectival negation.

Kate's path to acquisition for adjectival negation is similar to that of Matt and Jane. Kate passes through the same stages as the other two learners, producing different forms of adjectival negation at different times. Diagram 4.8 presents the changes of the form of her IL grammar, showing the stages that she undertakes before she is considered to acquire the adjectival negation rule in the TL.

Diagram 4.8: The Development Stages of of Adjectival Negation: Kate



Initially, Kate's IL production consists of ∅ *tidak* ∅ (stage 1); after which she changes the form to *tidak* + AP_{PRED} (stage 2) - at this point her production consists of unanalysed chunks copied from the class usage. The form *tidak* + AP_{PRED} continues to appear in the next stage (stage 3), but here it appears to be analysed and is counted as the onset of her application of the rule. Finally, the acquired form of *tidak* + AP_{PRED} appears (stage 4).

4.2.3.4 The Acquisition of Adjectival Negation: Summary

All of the students have similar paths in acquiring adjectival negation. Although Matt has the advantage of having had earlier input, he still shows stages that mirror those of Jane and Kate. This evidence reveals that there is a common path to acquisition of adjectival negation for all of the learners.

Table 4.14 below sets out the timing of the learners' development. Each row represents the stage of development, and the weeks when the learners

produced examples of the form are also included. The brackets show that there were no recorded occurrences.

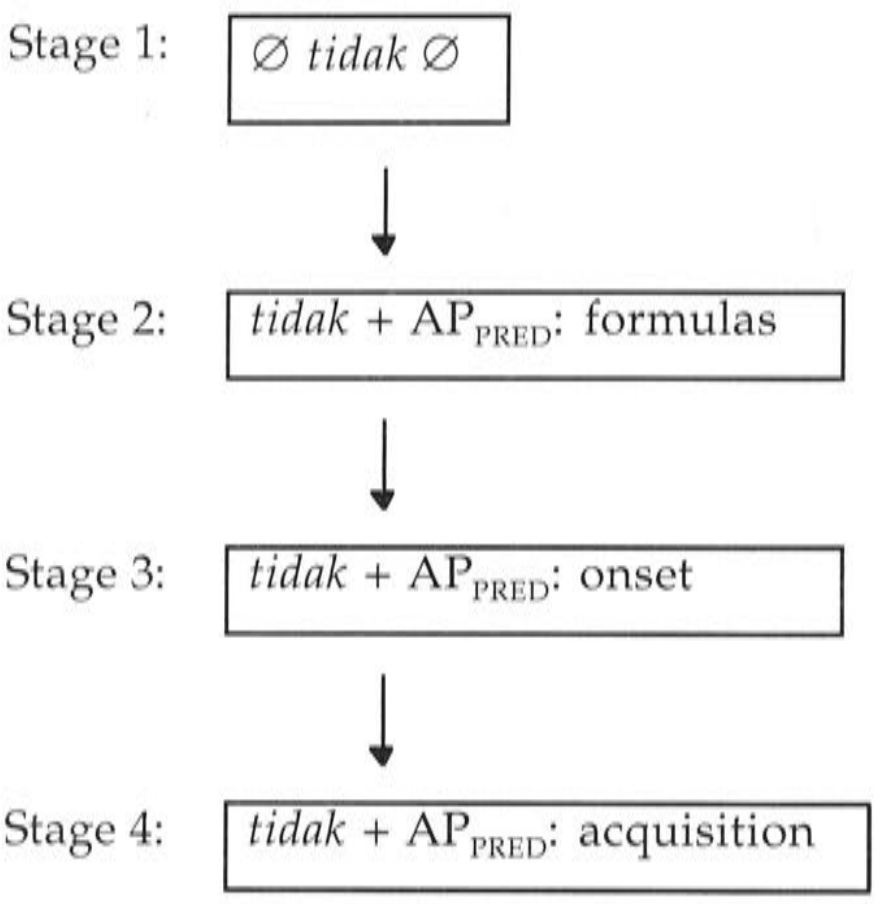
Table 4.14: The Development Stages of Adjectival Negation by Week: Matt, Jane and Kate

	Production	**Matt**	**Jane**	**Kate**
Stage 1	∅ *tidak* ∅	week 2	week 11	week 4
Stage 2	formulas	week 8-13	week 12	week 8
Stage 3	*tidak* AP_{PRED}: onset	week 15-16	(week 13)?	week 12
Stage 4	*tidak* AP_{PRED}: acquisition	week 17	week 15	week 15

The development of adjectival negation appears to lag behind the development of verbal negation for all three of the learners. The stages of development for verbal negation and adjectival negation do not correspond directly, so a comparison between the timing of the stages for the two structures is not appropriate. It is clear, though, that the acquisition of verbal negation (at stage 2 in Table 4.1a) occurs between 7 and 15 weeks before the acquisition of adjectival negation (at stage 4 in Table 4.1c). The reason for the slower development of adjectival negation is not clear; it appears that verbal and adjectival negation are very similar structures in terms of complexity, and so I would not expect a great deal of difference in the timing of their development.

In summary the three learners seem to have similar routes prior to acquisition, as shown in Diagram 4.9 below.

Diagram 4.9: The Development Stages of Adjectival Negation: Matt, Jane and Kate



Initially the learners all start with ∅ *tidak* ∅ at stage 1, possibly this is a one word negation stage, like the English holistic 'no'. At stage 2 *tidak* + AP_{PRED} appears, firstly as formulas where the utterances were possibly not analysed. This is followed at stage 3 by *tidak* + AP_{PRED} as onset. Stage 4 is when the production of *tidak* + AP_{PRED} is analysed and fulfils the criteria set out in the study.

4.2.4 The Acquisition of Nominal Negation: An Overview

Nominal negation is the last of the three negation structures to be acquired by the three learners. Because there are fewer data for nominal negation than for either verbal or adjectival, and because the frequency of production is much lower, it is harder to assess whether acquisition has taken place.

As for verbal and adjectival negation, all of the learners progress through several stages on their path to acquisition for nominal negation. Each stage

has its own form that represents the IL grammar at that time. In later sections I will discuss the individual stages of development leading to acquisition.

In Matt's case, it is clear that he acquires nominal negation. I also consider that Kate's data indicate that she has acquired nominal negation, though her performance after acquisition does leave it open to some doubt whether she did indeed acquire the structure. For Jane, I have concluded that there is insufficient evidence to suggest that she acquired nominal negation. I will discuss each individual case in the following sections.

It is interesting that nominal negation, using the form S ---> NP_{SUBJ} + *bukan* + NP_{PRED}, is the last of the three negation forms to be acquired. This is contrary to the teaching sequence adopted in the Indonesian course, which taught verbal negation, followed by nominal and finally adjectival.

Before I begin my analysis, I will briefly review the usage of *bukan* + NP_{PRED}, which was described in detail in Chapter Three. *Bukan* may be used to produce a sentence of the form S → NP_{SUBJ} + *bukan* + NP_{PRED}, such as (61), where the NP_{PRED} being negated (*pencuri* 'thief') is present in the statement.

(61) Dia bukan pencuri.
3Psg not thief
'He is not a thief.'

The construction S ---> NP_{SUBJ} + *bukan* + NP_{PRED} may also be used, as in (63), to negate a preceding sentence, such as (62), in which the predicate is a NP_{PRED} (*ibu rumah tangga* 'housewife'):

(62) Istri kamu ibu rumah tangga?
wife 2Psg mother household
'Is your mother a housewife?'

(63) Istri saya bukan ibu rumah tangga.
wife 1Psg not mother household
'My wife is not a housewife.'

The two different usages of nominal negation may look the same in isolation, but the distinction will appear in conversation contexts. Therefore, in this chapter I will present the contexts when they are appropriate.

The use of *bukan* to negate a preceding utterance seems to present more difficulty for the learners: there is no evidence to show that any of the learners is able to acquire this aspect of nominal negation reliably by the end of the interviews. This would imply that, at least as far as the learners' IL is concerned, using *bukan* to negate a preceeding sentence is perceived as an additional, or different, TL rule; and thus it should be included as an additional stage of development in nominal negation. I will not discuss this potential development in detail here, since there is very little evidence in my data; however, I believe a detailed examination of the development of all uses of the nominal negator *bukan* would be a valuable area for future research.

I present a detailed discussion of the acquisition of nominal negation for each learner in the sections which follow.

4.2.4.1 The Acquisition of Nominal Negation: Matt

It is quite hard to gain a clear picture of Matt's acquisition of nominal negation, because the frequency of production is much lower than for verbal or adjectival negation.

Table 4.15 The Acquisition of Nominal Negation: Matt

	bukan + NP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	0/9	0
4	0/3	0
8	[0/1]	0
9	[0/1]	[0]
11	[0/2]	[0]
12		
13	[1/2]	[0.5]
15	0/3	0
16	[0/1]	[0]
17	[0/1]	[0]
21	[1/1]	[1]
24		
27	2/3	0.67
30		
33		
37	4/4	1
39	[1/1]	[1]
41	[1/1]	[1]
45		
51	[1/1]	[1]
53	[1/2]	[0.5]
68	[1/2]	[0.5]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Table 4.15 shows the occurrences of nominal negation during the data collection period. In week 13, Matt is able to use nominal negation in 1 out of 2 obligatory contexts. Then, from week 15 to week 17, he does not produce the form correctly. In week 21 he produces 1 correct application in the only context provided in that week. I have treated this as the onset of nominal negation, followed in week 27 by his acquisition of nominal negation with 2 out of 3 correct contexts.

Matt's post-acquisition production of nominal negation is interesting. He produces a number of examples of nominal negation with a low percentage of errors. In week 37 he is able to fulfil the obligatory nominal negation rule with 100% accuracy in 4 out of 4 appropriate contexts, and from week 39 to 68 (except in week 45 when there was no context) he could fulfil the obligatory rule on at least one occasion. This indicates that the nominal negation rule remains part of Matt's IL, confirming that his acquisition is valid.

I will highlight some instances which show different forms of the nominal negation structure used by Matt in advancing from one stage to the next in his lead-up to acquisition. Let us look at Matt's production in week 2: this is his first attempt to produce the nominal negation structure. In this week, the interviewer tried to elicit the structure *bukan* + NP_{PRED} nine times, and although Matt was trying to use the nominal negation, he was not able to fulfil any of the available contexts. At this stage his IL system for negation is possibly still at the stage of ∅ *tidak* ∅ (stage 1); for example, in (65) and (67). In (65), when the interviewer asked him whether the object she was holding was a pen, the expected answer would be at least *bukan pena* 'not a pen' (*bukan* + NP_{PRED}), but Matt opted to to say *∅ *tidak* ∅. Similarly, in (67) when Matt was asked whether the interviewer's name was Mrs Black (66), he answered *∅ *tidak* ∅ (67) instead of *bukan Ibu Black* 'not Mrs Black'. Because all 9 of Matt's productions in week 2 are similar forms, it appears that, at this

point, Matt is using *tidak* 'not' as an all-purpose word for 'no', and possibly he is not aware of the negator *bukan*.

(64) Iw: Apa-kah ini pena?
Q -marker DET pen
'Is this a pen?'

(65) *Er tidak.
er not
'Er not.'

(Mw2s16)

(66) Iw: Apa-kah saya Ibu Black?
Q -marker 1Psg Mrs Black
'Am I Mrs Black?'

(67) *Er tidak.
er not
'Not.'

(Mw2s72)

In week 2, the learners had already received the input for *bukan* + NP_{PRED}, and the textbook gives several models that could be applied in these circumstances, for example:

(68) Ini bukan pena.
DET not pen
'This is not a pen.'

(Johns 1989: 48)

In week 4 Matt had three contexts to produce nominal negation, but he fulfilled none. Unlike week 2 where the interviewer tried to elicit data for Matt to use *bukan* + NP_{PRED}, in week 4 the topic of the conversation led Matt

to use the structure naturally. For example, (69) is evidence that Matt has not acquired the nominal negation at this point in time. In all three productions, Matt uses **tidak* + NP_{PRED} instead of *bukan* + NP_{PRED}. It is possible that his IL grammar still includes *tidak* 'not' as an all-purpose negator.

(69) * Siapa pun bisa keliling tetapi tidak pemerintah.
who particle may go round but not government
'Whoever can travel but not the government.'

(Mw4s207)

Matt's production in week 4 does seem to indicate a development of his IL. His use of *tidak* + NP_{PRED} indicates that he is at stage 2 in his development of nominal negation. The three utterances produced by Matt in week 4 are considerably more complex than his week 2 production; in addition, they all occur during natural conversation between Matt and the interviewer, giving an indication of his IL at this point. The example of (70) shows that Matt's production is becoming more complex, also that he is constructing utterances to fulfil his own communication needs.

(70) *Ya lima negara five countries: Australia, Malaysia, Singapura,
Yes five country five countries Australia Malaysia Singapore
New Zealand dan Filipina tetapi tidak Indonesia.
New Zealand and Philipines but not Indonesia
'Yes five countries Australia, Malaysia, Singapore, New Zealand and the Philippines but not Indonesia.'

(Mw4s125)

In week 13 there is a slight change in Matt's IL form: it is possible that Matt starts to be aware that the lexical item *bukan* is used to negate NP_{PRED}, instead of *tidak*. For example in (72) Matt uses ∅ *bukan* ∅ :

(71) Iw: Apa kamu guru?
Q 2Psg teacher
'Are you a teacher?'

(72) Bukan.
not
'Not.'

(Mw13s229)

Although this is the single correct rule application in week 13, out of two provided contexts, it indicates that he is now aware of the negator *bukan* 'not'. At this point, it appears that Matt is still testing how to apply the rules for using *bukan*, because on another occasion in week 13 (73), he uses *bukan* to negate an adjective.

(73) * Saya bukan musical.
1Psg not musical
'I am not musical.'

(Mw13s129)

Matt's week 13 production clearly shows that he is experimenting with using *bukan* in various contexts, but apparently has not yet worked out the rules for nominal negation. In the other available context in week 13 (75), Matt still uses **tidak* + NP_{PRED} instead of *bukan* + NP_{PRED} in response to the interviewer's question in (74).

(74) Iw: Apa Ibu Rosemary masih boss Matt?
Q Mrs Rosemary still boss Matt
'Is Madam Rosemary still your boss?'

(75) * Uhm dia tidak boss Matt.
uhm 3Psg not boss Matt
'Uhm she is not my boss.'

(Mw13s36)

Looking closely at Matt's performance in subsequent weeks, it appears to be the case that his correct usage of the structure in week 13 (72) is an isolated case. In weeks 15, 16, and 17 Matt's rule application for nominal negation reverts to stage 1, that is *∅ *tidak* ∅. For example, in week 15 (77) and week 16 (79), he had opportunities to apply *bukan* + NP_{PRED} in response to questions from the interviewer (76) and (78); instead he opted to say * ∅ *tidak* ∅ in both cases.

(76) Iw: Ayah Matt petani?
father Matt farmer
'Is your father a farmer?'

(77) * Er tidak er.
er not er
'Er not er.'

(Mw15s265)

(78) Iw: Anda politician?
2Psg politician
'Are you a politician?'

(79) * Tidak er.
not er
'Not er.'

(Mw16s84)

From these instances it can be seen that in terms of using *bukan* to negate NP_{PRED}, Matt still has not acquired the target language rule, and his IL is still somewhat fluid, as he reverts to the use of *∅*tidak* ∅ instead of *bukan* + NP_{PRED}.

The development to stage 3, and Matt's onset of nominal negation, comes in week 21. Again, there is only one occurrence in this week; but this is followed in subsequent weeks by several examples of the appropriate application of nominal negation, for example in (80):

(80) Saya bukan boss. ((laugh))
1Psg not boss
'I am not a boss.'

(Mw21s220)

Here, Matt has produced *bukan* + NP_{PRED}, rather than just ∅ *bukan* ∅ as in week 13 (72). This makes it seem more likely that he has analysed the nominal negation structure.

In week 27 Matt's IL grammar seems to develop to another stage, this time approaching the form of the TL. At this point there are sufficient occurrences to justify the assumption that he has acquired nominal negation. He appropriately applied the rule in 2 out of 3 cases, (82) and (83).

(81) Iw: Ini Alice Springs?
DET Alice Springs
'Is it Alice Springs?'

(82) Er bukan Alice Springs.
er not Alice Springs
'Er not Alice Springs.'

(Mw27s312)

(83) Er kami tidak bisa uhm membeli susu segar karena
er 1Ppl-EXCL not can uhm buy milk fresh because
uhm itu bukan dairy.
uhm DET not dairy
'Er we could not buy uhm fresh milk because uhm it was not a dairy.'
(Mw27s206)

In (82) Matt was asked whether the interviewer was holding a picture of Alice Springs, and he replied *bukan Alice Springs* 'not Alice Springs', his rule application of *bukan* + NP_{PRED} is contextually and grammatically appropriate, and his production is spontaneous and coherent with the question being asked. So, his grammar at this stage has changed to *bukan* + NP_{PRED}, which is the TL structure.

After acquisition, in week 27, Matt continues to use the already established grammar of nominal negation well. In week 37, he could apply up to 4 correct occurrences of the rule, which shows that he is able to sustain the rule well. For example, in week 37, (84) and (85) show that his production was spontaneous, contextual, and his use of *bukan* + NP_{PRED} appropriate to the TL rule.

(84) Saya bukan sopir.
1Psg not driver
'I am not a driver.'
(Mw37s121)

(85) Dia bukan guru di ANU.
3Psg not teacher at ANU
'She is not a teacher at the ANU.'
(Mw37s252)

Between weeks 37 and 68 Matt is able to fulfil most of the contexts that occur for nominal negation, justifying the statement that he has acquired the nominal negation form *bukan* + NP_{PRED}. For example in week 51 (86):

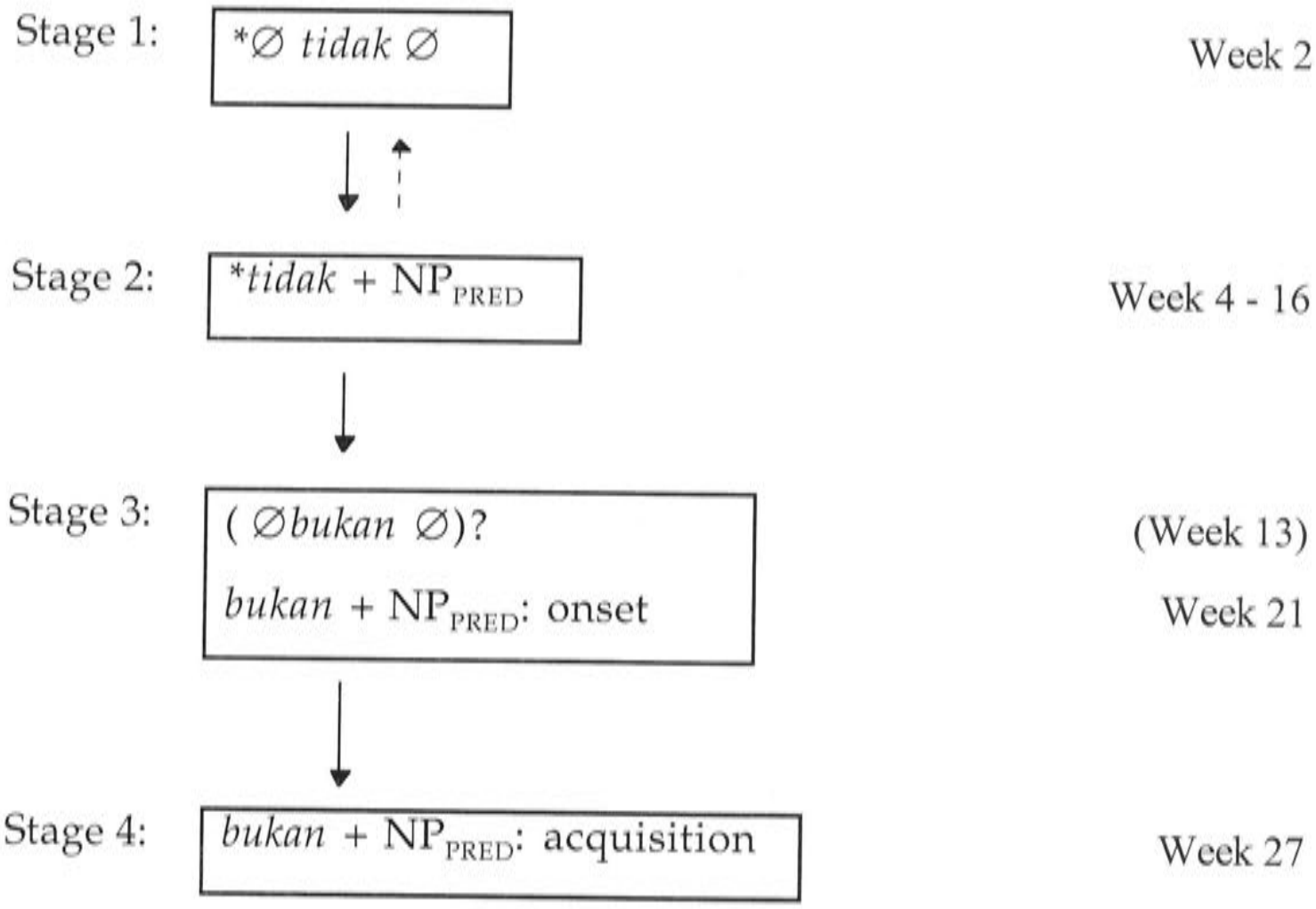
(86) Hal itu bukan rahasia.
Matter DET not secret
'That matter is not a secret.'

(w51s18)

In the period after Matt's acquisition, there are no contexts for him to produce nominal negation where he is using *bukan* to negate a previous sentence that contains an NP_{PRED}, so I cannot say whether he would also be able to use *bukan* to negate a preceding sentence. I will comment on this further with regard to Kate, whose production is rather more revealing in this respect.

To sum up, Matt's IL changes through several different stages on the path to acquisition, with each stage having its own form according to his IL grammar at that point. Diagram 4.10 shows the stages that Matt undertakes on his way to acquire nominal negation.

Diagram 4.10: The Development Stages of Nominal Negation: Matt



At first, Matt uses one word *∅ *tidak* ∅ for nominal negation (stage 1); and subsequently he changes the form into **tidak* + NP_{PRED} (stage 2). After stage 2, there is evidence that he reverts to stage 1, before proceeding to stage 3.[14] This is represented by the broken upward arrow. In the third stage, he is able to recognise the nominal negator by using *bukan* + NP_{PRED} (stage 3). Finally, he applies *bukan* + NP_{PRED} (stage 4). I believe Matt has acquired the nominal negation rule, and there is evidence that he sustains the use of nominal negation after acquisition.

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[14] Note that in stage 3 there is one example of ∅ *bukan* ∅, but it appears to have been an isolated case.

4.2.4.2 The Acquisition of Nominal Negation: Jane

All the learners have difficulty acquiring nominal negation, but it appears that Jane has the greatest difficulty of the three. It is difficult to see a coherent picture of acquisition for nominal negation for her, and in fact she does not fulfil the acquisition criteria set up in this study.

Table 4.16 shows that Jane tried several times to produce nominal negation between week 2 and week 24 without success, with the exception of week 16. Week 16 may mark the onset of the acquisition of nominal negation, with the appropriate rule application in 2 out of 2 contexts, but she is not able to sustain the rule application in sufficient contexts in subsequent weeks. What occurs in week 30 is particularly interesting and it will be discussed in detail in the section on development. In the period from week 33 to week 51 Jane produced only a few examples of nominal negation, most with some errors.

Table 4.16 The Acquisition of Nominal Negation: Jane

	bukan + NP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	[0/2]	[0]
4		
8		
9		
11		
12		
13		
15	[0/2]	[0]
16	[2/2]	[1]
17	[1/2]	[0.5]
21		
24	[0/1]	[0]
27		
30	2/3 ?	0.67?
33	[0/2]	[0]
37	[1/2]	[0.5]
39		
41	[0/2]	[0]
45		
51	[1/1]	[1]
53		
68		

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

I would like to highlight Jane's use of certain structures at different times. In week 2, when she first uses nominal negation, she uses the structure *∅*tidak* ∅. For example, in (87) and (89) the interviewer tries to elicit nominal negation, asking Jane to identify certain objects.

(87) Iw: Itu buku telepon?
DET book telephone
Is that a telephone book?

(88) * Tidak.
not
'Not.'

(Jw 2s34)

(89) Iw: Apa-kah ini pena?
Q-marker DET pen
'Is this a pen?'

(90) * Tidak.
not
'Not.'

(Jw2s38)

The expected answers to the questions would be at least *Bukan buku telepon* 'Not a telephone book' and *Bukan pena* 'Not a pen' for questions (87) and (89) respectively, instead of which Jane uses *∅*tidak* ∅ 'not' on both occasions. This places Jane at stage 1 of her nominal negation development. Similar to Matt, Jane's use of the structure *∅*tidak* ∅ is possibly an indication that she is using *tidak* 'not' as an all-purpose negator.

Jane's production of negation in week 2 is quite limited; and it is noticeable that, in the following weeks where the data are not elicited, there are no further contexts for nominal negation until week 15. This tends to suggest that Jane is not ready to produce this structure.

It is interesting that in week 8 Jane shows that she is aware of the negator *bukan*, and that this is used to negate noun (phrases). However, in this case, the context calls for verbal negation *tidak* + VP_{PRED}, to negate her conversation partner's question (91), rather than nominal negation:

(91) K: Apa Jane ada kucing?
Q Jane have cat
'Do you have a cat?'

(92) *Er tidak er bukan kucing. Apa Kate kucing?
er not er not cat Q Kate cat
'Er it is not a cat. Are you a cat?'
(Jw8s157)

The distinction here is semantic: *Bukan kucing* '[It is] not a cat' is grammatical, since simple descriptive sentences in Indonesian do not require a verb. However, Kate's question clearly calls for the verb *ada* 'to have' to be included in the answer. Jane's omission of the verb *ada* changes the meaning of the sentence. Instead of *Tidak ada kucing*. 'There is not a cat.' (or: I don't have a cat.) she produces *Bukan kucing* '[It is] not a cat.' The example of (92) seems to suggest that the verb *ada* 'to have' does not appear in Jane's IL yet.

In week 15, Jane has her first real opportunity to apply nominal negation, but she inappropriately applies the rules in both contexts. It is possible in this week that Jane's IL is in the process of developing from stage 1 (*∅ *tidak* ∅) to stage 2 (**tidak* + NP_{PRED}). Of the two responses produced, the first (94)

consists only of one word, **∅ tidak ∅*, in answer to the question (93) from her conversation partner:[15]

(93) K: *Kamu tidak Gemini?
2Psg not Gemini
'You are not Gemini?'

(94) * Tidak.
not
'Not.'

(Jw15s357)

In the second example, (95), Jane is able to produce a complete phrase, although she still applies **tidak* + NP_{PRED}, instead of *bukan* + NP_{PRED}. In this case, she was telling her conversation partner that her husband was not like a tree, because he was not tall. According to the TL grammar she is negating an NP_{PRED} not a VP_{PRED}, thus she is expected to say ... *bukan pohon*... 'not tree' instead of ...**tidak pohon* ... 'not tree'.

(95) * Suami saya tidak pohon. Dia tidak tinggi.
husband 1Psg not tree 1Psg not tall
'My husband is not a tree. He is not tall.'

(Jw15s422)

Thus, Jane is still not able to use *bukan* appropriately for nominal negation. However, it does appear that her IL is developing, and at least the second utterance in week 15 can be classed as stage 2.

Week 16 marks a further development in Jane's IL, and can possibly be considered as the onset of the nominal negation acquisition by Jane: there

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[15] In this case, Jane's conversation partner Kate also made an error in applying nominal negation. I will deal with Kate's IL separately in the next section.

were two occurrences where Jane was able to use *bukan* ((97) and (98)) rather than the structures with **tidak*, as in previous weeks (such as week 2).

(96) Iw: Jam Rolex itu?
Watch Rolex DET
'Is it a Rolex watch?'

(97) Er bukan.
er not
'Er not.'

(Jw16s265)

(98) Dia tidak er dia bukan Katolik.
3Psg not er 3Psg not Catholic
'She not er she is not a Catholic.'

(Jw16s118)

In both (97) and (98) Jane used the negator *bukan* instead of *tidak*. This shows a significant change in her IL; however, it is hard to determine whether her IL grammar is just ∅ *bukan* ∅, or *bukan* + NP_{PRED} because she produces both structures. In (98) it is interesting to note that she firstly uses the negator *tidak* 'not', which is inappropriate, then immediately self-corrects and uses the appropriate nominal rule application. This shows that Jane has started to be aware of the difference and to work out that there are two distinct negators, *tidak* and *bukan*, so I have treated this as the onset of Jane's nominal negation acquisition. However, Jane's subsequent production of *bukan* + NP_{PRED} is somewhat erratic, and there are relatively few contexts for nominal negation, so that it is difficult to chart her development to ascertain whether she is progressing towards acquisition.

Jane's performance on nominal negation in week 16, that is:

∅ *bukan* ∅ in (97)

bukan + NP_{PRED} in (98)

shows that her IL production has developed from stage 2 (**tidak* + NP_{PRED}) in week 15 to stage 3 (∅*bukan*∅ and *bukan* + NP_{PRED}) in week 16. There is a significant difference in her performance of nominal negation between week 15 and week 16. In week 16, the nominal negator *bukan* 'not' has already emerged as an independent nominal negator, it is not being used for the same function as *tidak* 'not'. In other words, Jane's IL appears to have established that *tidak* and *bukan* are separate negators, and that *bukan* is used to negate a noun (phrase). This is a distinction she did not make in week 15. It may seem simple, but this could be a major development in the learner's grammar.

Jane's production in week 30 needs to be examined carefully. Her case is different from those of Matt and Kate and, after careful review, I concluded that she does not satisfy all the acquisition criteria for nominal negation at this point. In week 30 she does apply the appropriate rule in 2 out of 3 obligatory contexts, which satisfies one of the criteria for acquisition; however, I do not believe that she has acquired nominal negation at this point because the correct applications are in fact identical. See (100) and (101).

(99) K: Saya mahasiswa bertanggungjawab dan rajin.
1Psg student responsible and diligent
'I am a responsible and diligent student.'

(Kw30s66)

(100) Anda bukan mahasiswa yang bertanggungjawab.
2Psg not student REL responsible
'You are not a responsible student.'

(Jw30s67)

(101) Kate bukan mahasiswa yang bertanggungjawab atau rajin.
Kate not student REL responsible or diligent
'Kate, you are not a responsible or diligent student.'

(Jw30s93)

In (100) and (101) the structure of the utterance has been provided by Kate in (99); so Jane is simply constructing a sentence by inserting the negative particle *bukan* into the sentence provided by her conversation partner. It is perharps also relevant that this sentence is almost identical to a classroom substitution drill from the textbook (102).

(102) Dia bukan guru yang bertanggungjawab.
3Psg not teacher REL responsible
'He is not a responsible teacher.'

(Johns 1989:88)

Jane is using repertoire; this means that her utterances cannot be classified as spontaneous, nor do they fulfil the requirement for using the structure with 3 different lexical items. Therefore, Jane has not fulfilled all the criteria for acquisition (cf Pienemann 1998: 127 -129). Nevertheless, it does appear that Jane is able to distinguish between the use of *tidak* + AP_{PRED} (103) and *bukan* + NP_{PRED} ((100), (101)) at this point. In (103), Jane rewords sentence (101) so that she is negating the adjective *bertanggungjawab* 'responsible', which requires the use of *tidak*:

(103) Anda mahasiswa yang tidak bertanggungjawab atau rajin.
2Psg student REL not responsible or diligent
'You are not a responsible or diligent student.'

(Jw30s69)

Thus, Jane is able to apply the correct negator, *tidak*, for the adjective phrase (103), just as she was able to supply the nominal negator *bukan* appropriately in ((100), (101)). This requires a re-working process in her IL, because in order to supply the appropriate negator, she has to identify the grammatical category of the following phrase. I regard Jane's production in week 30 as evidence of development in her IL, possibly confirming the onset of nominal negation. In subsequent weeks, Jane does produce some examples of nominal negation, though with frequent errors. There are not sufficient examples to consider that she acquires nominal negation at any point, and her errors continue to outnumber the correct rule applications.

Jane's production of the nominal negation *bukan* + NP_{PRED} is not sustained in subsequent weeks. In weeks 37 and 41, her production still appears to be typical of stage 3 (onset). For example, in (105), in response to the question from her conversation partner (104), Jane does manage to correct herself, so that the production of *bukan* is correct. However, the utterance itself is still typical of stage 3 that is ∅*bukan*∅:

(104) K: ... dan dia pencuri?
... and 3Psg thief
'... and is he a thief?

(105) Uhm tidak oh bukan.
uhm not oh not
'Uhm not oh not.'

(Jw41s314)

In week 51 Jane once again self-corrects to apply the appropriate nominal negation rule (106) after her first utterance when she realises that her negative rule application was inappropriate. This shows that she is able to use the specific target language rule correctly in this context:

(106) Uhm tidak uhm bukan kucing saya.
Uhm not uhm not cat 1Psg
'Uhm [it is] not my cat.'

(Jw51s285)

This utterance may show that Jane's IL has developed to stage 4, showing her application of *bukan* + $NP_{PRED.}$ However, because there is only one example, and because there were no data in subsequent recordings (week 53 and the last interview in week 68), it is not possible to be certain that Jane's use of the structure is sustained. Nevertheless, it does appear that this is a genuine example: it does not seem to be copied from her conversation partner, or from a substitution drill. In addition, the fact that Jane manages to correct her initial use of **tidak* without prompting does suggest that she is able to work out the usage of *bukan* + $NP_{PRED.}$

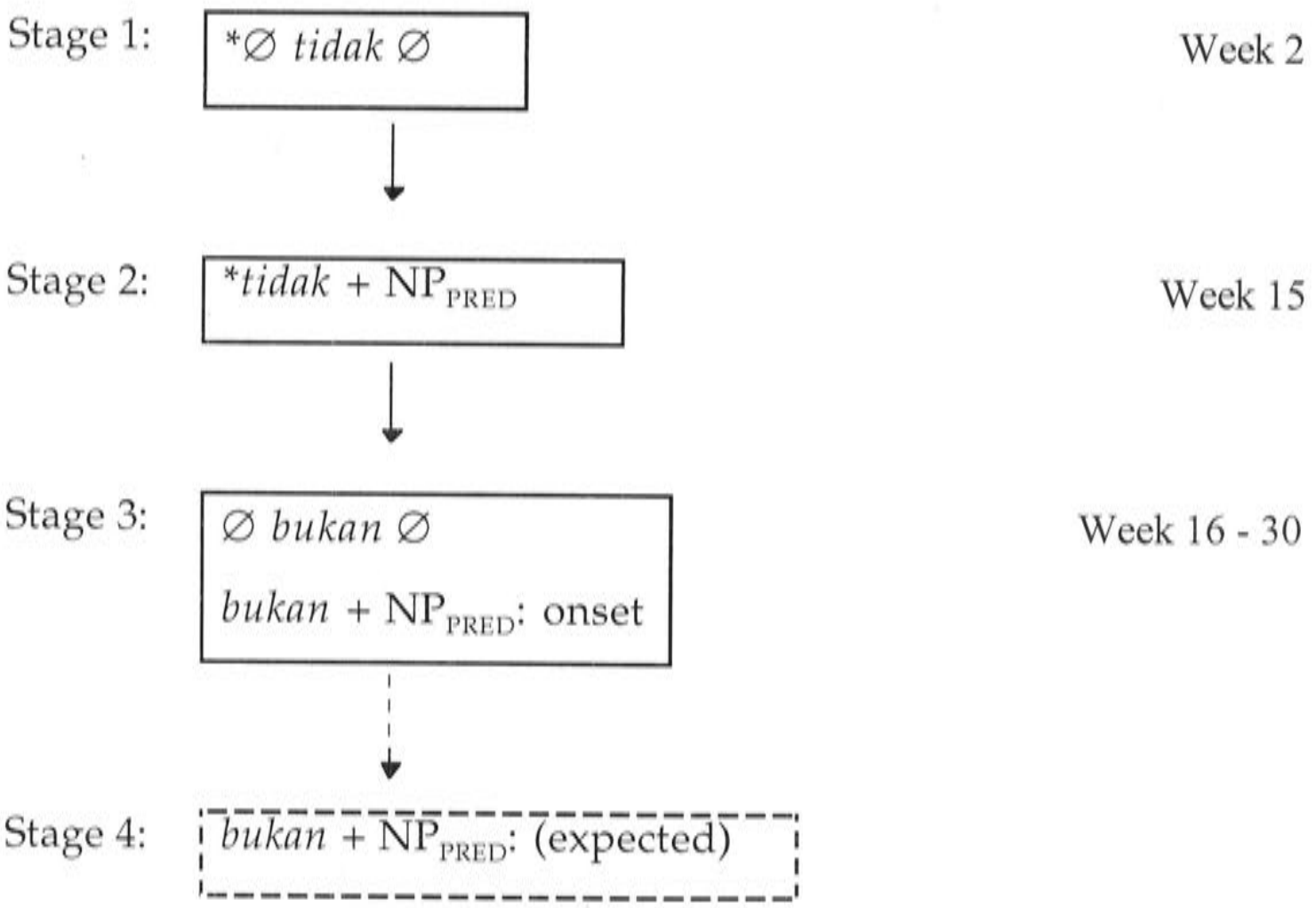
It is remarkable that Jane's production of nominal negation appears not to develop significantly between weeks 16 and 51. This is a considerable period for a learner's IL to be essentially static in one respect, and it seems to indicate that Jane is experiencing some difficulty with the TL rules for nominal negation. I am not able to explain why this should be so. Although Jane's fellow learners also experience difficulty with using *bukan* + $NP_{PRED,}$ in their case the nominal negation form does develop before the end of interviews.

Jane's acquisition of nominal negation is more problematic than that of the other learners. Although she appears to go through several stages on her path to acquisition, and these stages are similar to those of the other

learners, it does not appear that she completes her journey to acquisition during the period of the interviews.

To sum up, Diagram 4.11 shows Jane's IL as she develops towards acquisition. Like Matt, she produces different forms at different times. However, it appears that Jane's IL is still in the process of developing in week 51. Although she does not acquire nominal negation during the interview period, it may be that that Jane takes longer than the other learners to acquire the nominal negation. Had there been a subsequent interview period, this would have been verifiable.

Diagram 4.11: The Development Stages of Nominal Negation: Jane



Jane initially uses one word * ∅ *tidak* ∅ to express nominal negation (stage 1); then the form changes into **tidak* + NP_{PRED} (stage 2). In the third stage, she recognises the nominal negator by using ∅ *bukan* ∅ and *bukan* + NP_{PRED} (stage 3). The broken border for stage 4 shows that she could be expected to reach this stage had the data collection continued. At this point, it is uncertain whether Jane has acquired nominal negation in her IL, due to

questions about the spontaneity of her language and also lack of subsequent occurrences.

4.2.4.3 The Acquisition of Nominal Negation: Kate

Like Matt, Kate acquires nominal negation last. As with the other learners, she produces fewer ocurrences than for the other two types of negation, so once again a clear picture of the stages in the development of her IL does not emerge. In some instances, there are not enough contexts to make an assessment.

Table 4.17 shows Kate's production of nominal negation during the data collection period. Between week 2 and week 16 she has several attempts at producing nominal negation, but only one is correct. In week 17 Kate manages to produce 1 out of 3 obligatory rule applications, and in week 24, 1 out of 2. Applying the criterion of 2 correct rule applications out of 3 obligatory contexts in a single interview, Kate would be considered to have acquired nominal negation in week 37. Subsequently, from week 39 to week 68, the number of contexts for application of the nominal negation rule is very small, with only one or two in each week, and she produces frequent errors. However, I do believe that to consider that acquisition has occurred is valid, and that the errors which appear in these weeks are in fact evidence of further development in her IL.

Table 4.17 The Acquisition of Nominal Negation: Kate

	bukan + NP_{PRED}	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	0/3	0
4	[1/2]	[0.5]
8	[0/1]	[0]
9		
11		
12		
13		
15	[0/2]	0
16	[0/1]	[0]
17	[1/3]	[0.33]
21		
24	[1/2]	[0.5]
27	0/5	0
30	[1/1]	[1]
33		
37	2/3	0.67
39		
41	[1/2]	[0.5]
45	[0/1]	[0]
51	[1/1]	[1]
53	[0/1]	[0]
68	[0/2]	[0]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In this section, I will describe how Kate's grammatical forms change from one stage to the next in her path to acquisition. She first tried to produce nominal negation in week 2. In this week, the interviewer used data elicitation, trying to encourage Kate to produce nominal negation by asking her questions.

(107) Iw: Apa-kah ini buku bahasa Indonesia?
Q-marker DET book language Indonesia
'Is this an Indonesian book?'

(108) * Er tidak.
er not
'Er not.'

(Kw2s14)

(109) Iw: Apa-kah ini buku telepon?
Q-marker DET book telephone
'Is this a telephone book?'

(110) * Tidak uhm.
not uhm
'Not uhm.'

(Kw2s22)

The questions in (107) and (109) were framed for Kate to use *bukan* + $NP_{PRED,}$ instead Kate opted to say *∅ *tidak* ∅ (108) and (110). This shows that she is at stage 1 in her development of nominal negation. Possibly, she uses *tidak* 'not' as all-purpose negator. This phenomenon is parallel to the other learners, Matt and Jane.

Between week 4 and week 16, Kate appears to be actively trying to work out the form for nominal negation. In the course of this, she does produce one

correct example, in week 4 (112), when she is responding to a question from her conversation partner (111).

(111) J: Apa ini kursi?
Q DET chair
'Is this a chair?'

(112) Bukan.
not
'Not.'

(Kw4s45)

It is possible that this utterance marks development in Kate's IL. This should be related to her frequent use of **ada* + *bukan* + NP_{PRED} 'have + not + NP_{PRED}' between weeks 4 and 16, which was described in the section on verbal negation. Between week 4 and week 16, Kate uses *bukan* regularly instead of *tidak* + *ada* + VP_{PRED}, for example (113):

(113) *... tetapi saya ada bukan anak-anak.
... but 1Psg have not child-child
'... but I don't have children.'

(Kw12 S201)

Because this structure is employed frequently over a period of several weeks, it is clear that this is part of Kate's attempt to establish the correct rules for negation. The use of this structure indicates that Kate is aware of the different negators *tidak* and *bukan*, and may understand that *bukan* is used to negate noun (phrases). However, in this case she is using the incorrect word order and incorrect negator (*VP_{PRED} + *bukan* + NP_{PRED} for the context of *tidak* + VP_{PRED}), so she cannot be deemed to have acquired nominal negation.

In week 15, Kate uses *tidak* for nominal negation. This places her at stage 2 of development, and it seems her IL is now developing in a similar way to Matt's and Jane's, in that she is using **tidak* + NP_{PRED} for nominal negation, for example (114) and (115):

(114) * Itu tidak pool anak-anak.
DET not pool child-child
'It is not a children's pool.'

(Kw15s300)

(115) * Kamu tidak Gemini?
2Psg not Gemini
'You are not Gemini?'

(Kw15s356)

Kate's reversion to using *tidak* for nominal negation should be viewed as part of her continuing development. Her previous use of **ada* + *bukan* + NP_{PRED} demonstrated an awareness of the existence of the negator *bukan*, but it should not be seen as representing acquisition of nominal negation. Now, Kate uses the negator in the correct position before the predicate, although she uses *tidak* instead of *bukan*, and she continues to use the correct positioning for all forms of negation for the remainder of the study.

Table 4.17 shows that in week 17 Kate uses the rule of the nominal negation appropriately in 1 out of 3 occurrences. In (117) she uses *∅bukan ∅* when her conversation partner asks whether the reddish things were radishes:

(116) J: Apa itu radish uhm merah-merah?
Q DET radish uhm red-red
'Are the reddish things radishes?'

(117) Bukan.
not
'Not.'

(Kw17s349)

This suggests that she is beginning to work out the grammar of the TL, and is beginning to be able to use the nominal negator appropriately. For this reason, I class week 17 as Kate's development to stage 3 for nominal negation. Similarly, in week 24 Kate uses *bukan* + NP_{PRED} (118):

(118) Kami bukan keluarga besar.
1Ppl-EXCL not family large
'We are not a large family.'

(Kw24s254)

In week 27 there is some evidence that Kate reverts to stages 1 and 2 before proceeding to stage 4. This mirrors Matt's performance, where he reverted from stage 2 to stage 1 before proceeding to stage 3. In this week, Kate had five contexts in which to use *bukan* + NP_{PRED}, but instead she uses *∅ *tidak* ∅ and **tidak* + NP_{PRED}.

(119) Iw: Apa-kah itu suami Kate?
Q -marker DET husband Kate
'Is that your husband?'

(120) * Tidak.
not
'Not.'

(Kw27s128)

(121) Iw: Susu dan keju, apa-kah itu makanan vegetarian?
milk and cheese Q-marker DET food vegetarian
'Milk and cheese, are they vegetarian food?'

(122) * Tidak makanan vegetarian.
not food vegetarian
'Not vegetarian food.'

(Kw27s286)

Looking at the contexts in week 27, it is quite clear that the answers to the interviewer's questions need to be framed to negate NP_{PRED}. For example, in (119) the interviewer asked Kate whether the man in a picture was her husband, and Kate answered *∅ *tidak* ∅ (120) instead of (at least) *Bukan suami saya* 'Not my husband.' In (119) Kate was asked whether milk and cheese were vegetarian food, the expected answer according to the TL would be (at least) *Bukan makanan vegetarian* 'Not vegetarian food'; instead Kate opted to use **tidak* + NP_{PRED} (**Tidak makanan vegetarian* 'Not vegetarian food.') (122).

It appears that the learners tend to have some weeks when they use one negator for all circumstances, even when they have previously been able to distinguish the negators *tidak* and *bukan* and use them appropriately. This happened to Matt, with his blanket use of *bukan* in week 37, after he had apparently acquired all three negation structures. Kate displays a similar development, using *tidak* for all negation forms. The re-emergence of the use of *tidak* + NP_{PRED} for nominal negation should be regarded as part of Kate's IL development. Selinker (1972: 215-216) states that this phenomenon of 'backsliding', where structures re-emerge after apparently disappearing from the learner's IL, sometimes occurs when learners are concentrating on new material, and should be viewed as part of their progress towards an IL norm.

Week 37 is the time when Kate is considered to have acquired the nominal negation, as she could fulfil 2 out of 3 contexts with the proper rule application in a single interview. This is also where her IL develops to stage 4: that is, she is able to use the form *bukan* + NP_{PRED}. In both contexts, (123) and (124), Kate shows that she is able to apply the expected grammar of the TL; that is, at least *bukan* + NP_{PRED}. This is done spontaneously and coherently with the topic of conversation. For example, in (123) Kate commented that the blue clothes in the picture were not police uniforms, and in (124) Kate's conversation partner remarked from a picture that the thief was caught stealing, and Kate said that maybe he was not a thief. These exchanges show that Kate's remarks were contextually proper; also, she uses a variety of lexical items, and the structures appear to be constructed according to her communication needs, rather than taken from learned chunks.

(123) Seragam bukan seragam polisi.
uniform not uniform police
'Uniform not police uniform.'

(Kw37s46)

(124) Mungkin dia bukan pencuri.
maybe he not thief
'Maybe he is not a thief.'

(Kw37s70)

By contrast, in week 45 (126), Kate is not able to supply the appropriate negator in response to Jane's question (125):

(125) J: Apa dia guru sekolah?
Q 3Psg teacher school
'Is he a school teacher?'

(126) * Er tidak uhm dia uhm guru universitas.
er not uhm 3Psg uhm teacher university
'Er not uhm he is a university teacher.'

(Kw45s170)

In this case, the expected complete construction would be (127):

(127) Bukan, dia bukan guru sekolah, dia guru universitas.
not 3Psg not teacher school 3Psg teacheruniversity
'No, he is not a school teacher, he is a university teacher.'

Similarly, in week 68, Kate was asked whether her mother was a public servant, and she answered (128):

(128) * Tidak, dia guru sekolah.
not 3Psg teacher school
'No, she is a school teacher.'

(Kw68s41)

In this case, the expected complete target language structure would be (129):

(129) Bukan, dia bukan pegawai negeri, dia guru sekolah.
not 3Psg not employee state 3Psg teacher school
'No, she is not a public servant, she is a school teacher.'

In (128), Kate is responding to a question framed around a NP_{PRED}, and so should use the nominal negator *bukan*. It is clear that she is not yet fully confident with using *bukan* + NP_{PRED} where she is negating a preceding sentence, as in (126) and (128). I believe these errors, rather than calling into question her acquisition of nominal negation, can be viewed as evidence for further development in Kate's IL.

Although Kate continues to have some difficulty with nominal negation after week 37, I believe that a detailed analysis of her post-acquisition production of nominal negation shows that she is able to construct utterances using *bukan* + $NP_{PRED,}$ for example in week 41 (130).

(130) Gambar itu bukan uhm penggambaran yang baik
picture that not uhm representation which good
'That picture is not a good representation.'

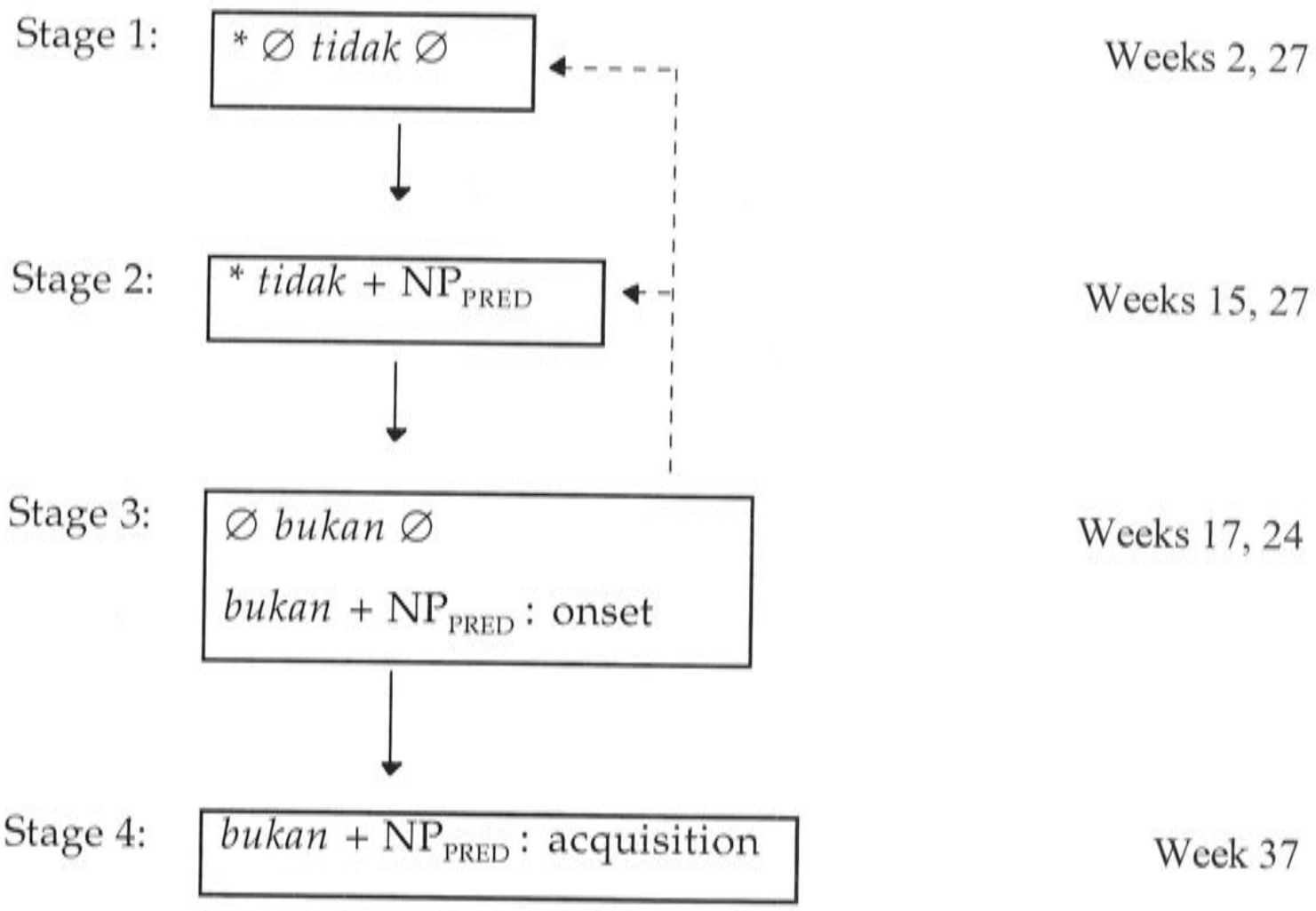
(Kw41s55)

There is some hesitation in producing this utterance; but this appears to be related to constructing the complex attributive adjective *penggambaran yang baik* 'a good representation' (see Chapter Five), rather than to the use of negation. I believe this shows that Kate can continue to apply the rule for nominal negation; confirming that nominal negation remains part of her IL after acquisition in week 37.

To sum up, Kate follows a similar path to Matt in her development of nominal negation, although there are some interesting phenomena in her development. Firstly, Kate's frequent use of **ada* + *bukan* + NP_{PRED} shows her early attempts to work out the rules for negation - she seems to be aware that *bukan* is used to negate noun phrases, but she is not yet positioning the negator correctly before the predicate (in this case, the negator should be positioned before *ada*, so that Kate would be negating a VP_{PRED} - this is described in section 4.2.2.3). Secondly, her post-acquisition production shows more clearly than in the other learners that the use of *bukan* to negate a previous sentence presents more difficulty than when *bukan* + NP_{PRED} is contained within the learner's own sentence.

Diagram 4.12 shows the stages that Kate passes through on her way to acquiring the nominal negation:

Diagram 4.12: The Development Stages of Nominal Negation: Kate



Initially, Kate uses one word *∅*tidak* ∅ for nominal negation (stage 1); then the form changes into **tidak* + NP_{PRED} (stage 2). In the third stage, she recognises the nominal negator by using ∅ *bukan* ∅ and *bukan* + NP_{PRED} (stage 3). At this point, there is some evidence that Kate reverts to stages 1 and 2, represented by the broken arrow. Finally she is able to apply *bukan* + NP_{PRED} (stage 4). I believe she has acquired the rule of nominal negation of the TL at this point.

4.2.4.4 The Acquisition of Nominal Negation: Summary

From the data collected from the three learners, it is clear that nominal negation is the last of the three negation structures acquired. This could be related to the fact that nominal negation is 'more marked' than verbal and adjectival negation. The use of the nominal negator *bukan* requires the learners to be able to identify appropriate contexts, which means correctly identifying the noun phrase as predicate in a sentence.

In terms of how accurately the learners could apply the rules of the TL, the following table presents percentages to illustrate the learners' accuracy rates at the point of acquisition. Table 4.18 shows that Matt and Kate have fulfilled the criteria for acquistion, but Jane has not.

Table 4.18: The Accuracy Rates at the Time of Acquisition for Nominal Negation: Matt, Jane[16] and Kate

	Matt	Jane	Kate
Week	27	(30)?	37
Percentage	67%	(67%)?	67%

It is interesting that Jane could not be categorised as having acquired nominal negation due to lack of evidence. The structure was introduced to the learners very early in the course (week 2), just after the verbal negation structure (week 1). The input included the use of *bukan* to negate a NP_{PRED}, as well as the negation of a preceding sentence. However, even 15 months after the input was provided, it is not clear that Jane has acquired the structure; and none of the learners has acquired the use of *bukan* to negate a

[16] The evidence does not support the conclusion that Jane has acquired the nominal negation, but I have included her in the table for completeness.

preceding sentence. This would appear to bear out Pienemann's (1984, 1987, 1988, 1989, 1998) assertion that learners will not acquire a structure for which they are not developmentally ready, even though instruction focuses on the structure. In the case of nominal negation, the primary requirements for developing the structure are an understanding of the two different negators *tidak* and *bukan,* correct positioning of the negator before the predicate, and the ability to differentiate between a noun phrase predicate and a verb or adjectival phrase. I speculate that this last requirement is the most complex for learners to perform, especially when trying to respond to a preceding utterance. I note here that all three of the learners were among the top students in their year for Indonesian; their difficulties with acquisition should not be attributed to any lack of motivation or ability. While it may seem fairly straightforward to distinguish between a noun and a verb, to do this in natural speech is, as revealed in this study, a skill that can take some time to acquire.

The data show that the three learners pass through similar stages prior to acquiring nominal negation. Table 4.19 shows these stages. Initially, the learners use *∅*tidak* ∅ (stage 1); then they go through a stage of using *tidak* + NP_{PRED} (stage 2). It is possible that, in the early stages, *tidak* is used as an all-purpose negator. However, it should be pointed out that all the learners seem to experiment with the two negators, *tidak* and *bukan*, trying to work out which contexts are appropriate for each negator. The third stage, using ∅ *bukan* ∅ and *bukan* + NP_{PRED} (onset), indicates that the learners have begun to understand and apply the rules for nominal negation, before the acquisition of the nominal negation rule using *bukan* + $NP_{P\ RED}$ (stage 4).

It is worth noting that all the learners had difficulty using *bukan* to negate a previous sentence, even after they reached stage 4 in their nominal negation (and thus would be considered to have acquired the structure). This probably indicates that I have not been able to present the full picture for the development of nominal negation in this study; and that there would be an additional 'post stage 4' period of development, where learners would continue to develop their use of *bukan* + NP_{PRED} to negate a preceding utterance.

Note, though, that Matt does not have occasion to attempt to negate a previous sentence which was based on a noun phrase. I suspect that, if these contexts had occurred, the picture of his post-acquisition production may have been different. Although the basic structure for nominal negation is acquired, and Matt can use the rules to negate an NP_{PRED} when it is present in his own utterance, I suspect that the more complex rules governing the negation of a preceding sentence would still be in the process of development at the end of the study.

Table 4.19 sets out the stages of development for nominal negation, together with an indication of the weeks in which the learners produced utterances typical of these stages. Note that, where a week is enclosed in brackets, it indicates that the development to that stage is uncertain for that week.

Table 4.19: The Development Stages of Nominal Negation by Week: Matt, Jane and Kate

	Production	Matt	Jane	Kate
Stage 1	* ∅ *tidak* ∅	week 2 week 15	week 2 week 27	week 2 week 27
Stage 2	* ∅ *tidak* NP_{PRED}	week 4	week 15	week 15 week 17 week 27
Stage 3	∅ *bukan* ∅ *bukan* NP_{PRED}: onset	(week 13) week 21	week 16	week 17 week 24
Stage 4	*bukan* NP_{PRED}: acquisition	week 27	(week 30) week 51	week 37

It is apparent from this table that the development of nominal negation is less clear-cut than the development of the other forms. Quite frequently, learners are using negation forms typical of two stages of development in the same week; even, in some cases, using forms typical of a stage prior to their current stage of development. This happens to some extent with the other forms of negation, but it is more common with nominal negation. I do not believe the overlapping of stages invalidates the description of the stages of development. As stated at the beginning of this chapter, they are not intended to be rigid stages; rather they are an indication of the gradual process of development of the learners' IL, during which they will typically produce a range of forms at different times, tending to produce the more complex forms, closer to the TL norms, as the IL develops.

The presence of frequent errors after I have categorised the structure as acquired does present a problem. According to Pienemann (1998), once a learner has acquired a particular rule, he or she would be likely to retain this

rule for future purposes. Pienemann (1998:147) claims that once a structure is acquired it is likely that the learner will be able to continue to apply the rules appropriately, so that a structure that has been acquired will not disappear from the learner's IL. While the post-production production of nominal negation, especially by Kate, seems to run counter to Pienemann's claim, I do not believe that this is in fact the case. A detailed analysis of the learners' production shows that they are able to use nominal negation correctly in those cases where they are directly negating a noun: but all three have difficulty if they are negating a noun phrase from a preceding utterance. In other words, it is possible that the acquisition of nominal negation may involve the acquisition of at least two separate rules.

It appears that my data do not provide a complete picture of the development of nominal negation. Specifically, I would point to the following issues:

i) Rather than a single rule for nominal negation, there appear to be several, at least in the perception of the learners. For example: the learners are able to use *bukan* to negate a noun or NP_{PRED} in their own utterance, but they have not yet acquired the use of *bukan* to negate NP_{PRED} in a preceding question.

ii) The study used data collected over a period of 15 months; it appears that this was insufficient time for all aspects of nominal negation to develop.

iii) Quite often, my data did not contain sufficient examples of nominal negation to enable a firm conclusion to be drawn about learners' development and acquisition. It is possible that using more heavily elicited data would have produced denser data, and hence given a clearer picture of development.

I hope that it will be possible to conduct future studies, specifically on this aspect of the development of negation in Indonesian. This will enable these

issues to be addressed. Such a project would also require at least some cross-sectional data, because the development of nominal negation takes place over an extended period.

4.3 Discussion

The preceding discussion of acquisition and development has concentrated on the details of the learners' production. In this section, I describe the overall pattern of the learners' development and acquisition. This includes a comparison of the learners' acquisition times and a description of the sequence of acquisition for the different types of negation. At the end of this discussion I will briefly compare my findings with other studies of negation.

4.3.1 The Acquisition Time and Sequence of Negation: Matt, Jane and Kate

Comparing the timing of acquisition of the three learners, it can be seen from Table 4.20 that Matt is generally in advance of the other two learners. This applies to verbal and nominal forms of negation, although with adjectival negation, Matt does not appear to have any advantage.

Table 4.20: The Summary of Acquisition Time for Verbal, Adjectival and Nominal Negation: Matt, Jane and Kate

	Matt	Jane	Kate
Verbal : *tidak* + VP_{PRED}	week 2	week 8	week 8
Adjectival : *tidak* +AP_{PRED}	week 17	week 15	week 15
Verbal with aux : *tidak* + aux + VP_{PRED}	week 30	week 33	week 30
Nominal : *bukan* + NP_{PRED}	week 27	wk (30)?	week 37

Making allowance for Matt's previous experience of the language, it appears that the three learners' acquisition times for the various negation forms are broadly comparable. However, there are some anomalies, such as the ambiguity of Jane's acquisition of nominal negation. Thus, verbal negation (using a main verb) is acquired quite early in the process of development, followed, after several weeks, by adjectival negation; and finally, after a slightly larger gap, by verbal negation using an auxiliary and nominal negation.

It appears that the teaching sequence is not the principal determinant of the acquisition times for negation structures. In Chapter Six, I will discuss the differences between the timing of input and the time of acquisition in detail. However, it is clear that the teaching of nominal and adjectival negation early in the course (in weeks 3 and 4 of teaching respectively) did not result in the early acquisition of these structures. This supports Pienemann's prediction in his (1984, 1987, 1988, 1989) Teachability Hypothesis that the teachability of a structure at any stage of development depends on the student's readiness to learn structures at that stage. Teaching a structure before learners are ready to acquire it will not have any effect on acquisition.

Matt's pattern of acquisition is perhaps the clearest of the three learners. Matt acquires verbal negation first, followed after 15 weeks by adjectival negation, then there is a gap of 10 weeks before the acquisition of nominal negation. As well as the difference in acquisition times, there is a clearer picture for the acquisition of verbal negation than for the other two structures. Matt's post-acquisition production of verbal negation is sustained, and there is no doubt that his acquisition is genuine. There are fewer data available for adjectival negation, and after the acquisition in week 17 there are several weeks where there are fewer than 3 occurences. Similarly, with nominal negation, there are several weeks in the post-acquisition period where the acquisition criteria would not be fulfilled.

However, I consider that both adjectival and nominal negation are acquired and remain acquired, and Matt shows that he is able to use the structures confidently when contexts are available. The reasons for the lower frequency of adjectival and nominal negation in his production are not clear: it may simply be that there were fewer available contexts. Alternatively, it may indicate that he is indeed more confident with using the verbal negation form, having acquired this first and thus had more practice with the structure. From the data, it is not possible to provide a definite answer.

Turning to Jane, the picture for her verbal and adjectival negation is again clear. Verbal negation is acquired first, followed by adjectival negation 7 weeks later. It is doubtful whether she in fact acquires nominal negation. There is no doubt, though, that she has acquired both verbal and adjectival negation, since she is able to use these structures consistently in nearly all data collected after acquisition.

The picture is very similar for Kate, in that verbal negation, followed by adjectival negation, are both acquired and used fairly consistently after acquisition. Nominal negation is not used very much: and, though it is counted as acquired, Kate's production is not sustained at a high level after acquisition. This may be due to the small number of contexts available after acquisition.

Uncertainty over the acquisition of nominal negation does not affect the sequence of acquisition. It is clear that the sequence:

Verbal ⇒ Adjectival ⇒ Nominal

holds true for all the learners. It is also clear that their rate of progression was similar, with a gap from the acquisition of verbal negation to the acquisition of adjectival negation of between 7 and 15 weeks, although the rate of acquisition for nominal negation was much more variable.

It appears that all the learners find nominal negation harder to acquire than verbal or adjectival: not only is the acquisition much later, but at the point of acquisition the table shows that their accuracy is considerably less than for verbal or adjectival negation. Table 4.20 shows the learners' accuracy rates at their time of acquisition for each negation structure. Note that this table does not look at the timing of acquisition, and the structures were of course acquired at different times.

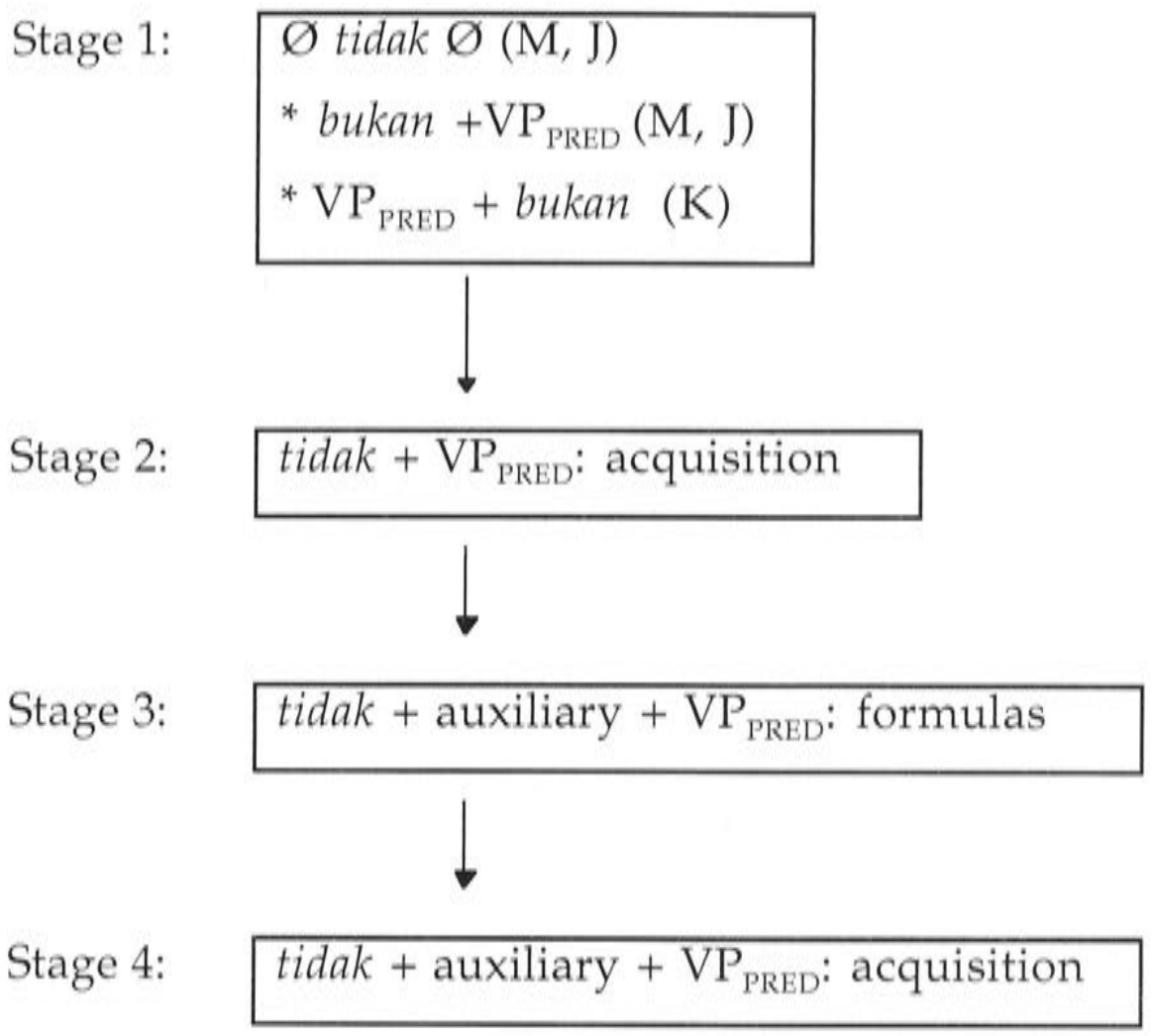
Table 4.21: The Accuracy Rates at the Time of Acquisition for Verbal, Adjectival and Nominal Negation

	Matt	Jane	Kate
Verbal Negation	83%	82%	92%
Adjectival Negation	100%	100%	100%
Nominal Negation	67%	(67%)?	67%

For verbal negation, the learners' accuracy at the point of acquisition was between 82% and 92%, and for adjectival negation all learners had 100% accuracy at the time of acquisition. This compares with 67% for nominal negation. In fact, both Matt and Kate fulfilled the acquisition criteria marginally: that is 2 correct appplications out of 3 possible contexts, and this is represented as 67%.

Turning briefly to the development of negation (Diagrams 4.13, 4.14, 4.15), it appears that all the learners progressed through a very similar series of stages in their development of the three forms of negation. Each negation form was traced through four stages of development, based on the typical forms produced by the learners. The first diagram (Diagram 4.13) below shows the development stages for verbal negation.

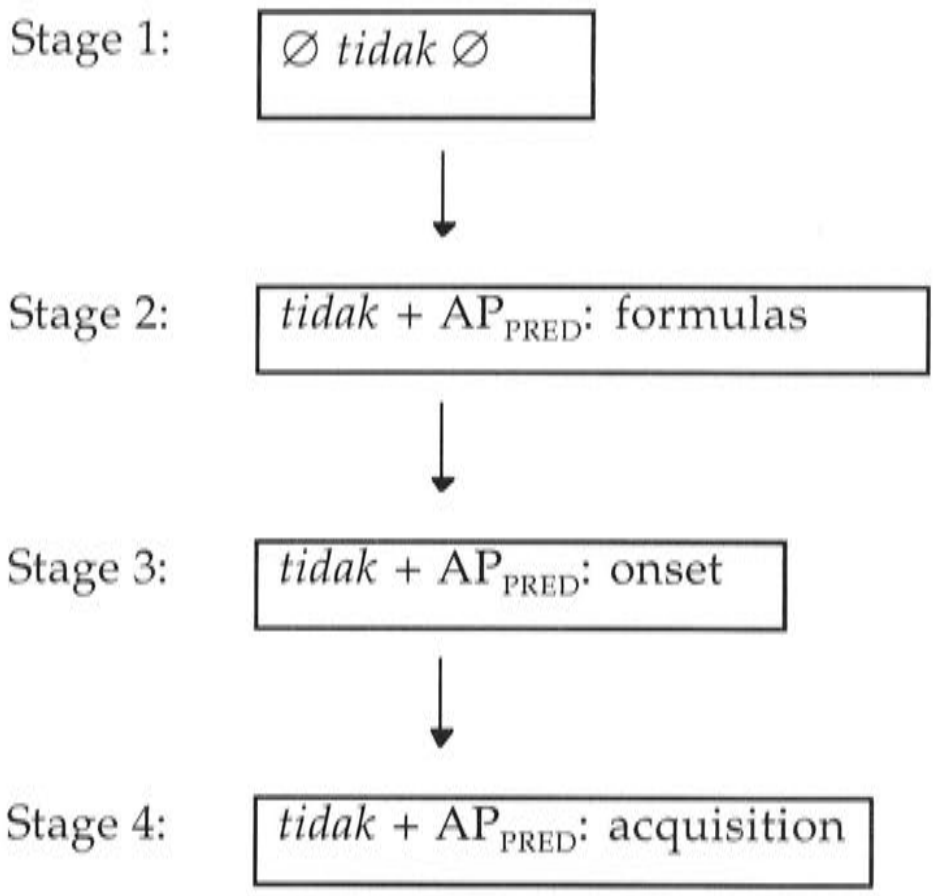
Diagram 4.13: The Development Stages of Verbal Negation: Matt, Jane and Kate



Note that the stages of development do not necessarily correspond to the point of acquisition: verbal negation, using *tidak* + main verb, is in fact acquired at stage 2 of development. Subsequently, all the learners continue to develop verbal negation through to the acquisition of verbal negation with an auxiliary at stage 4.

The picture of development for adjectival negation is very similar, showing four stages of development. The following diagram (Diagram 4.14) shows the development stages. This diagram is reproduced from Diagram 4.9 for the convenience of readers.

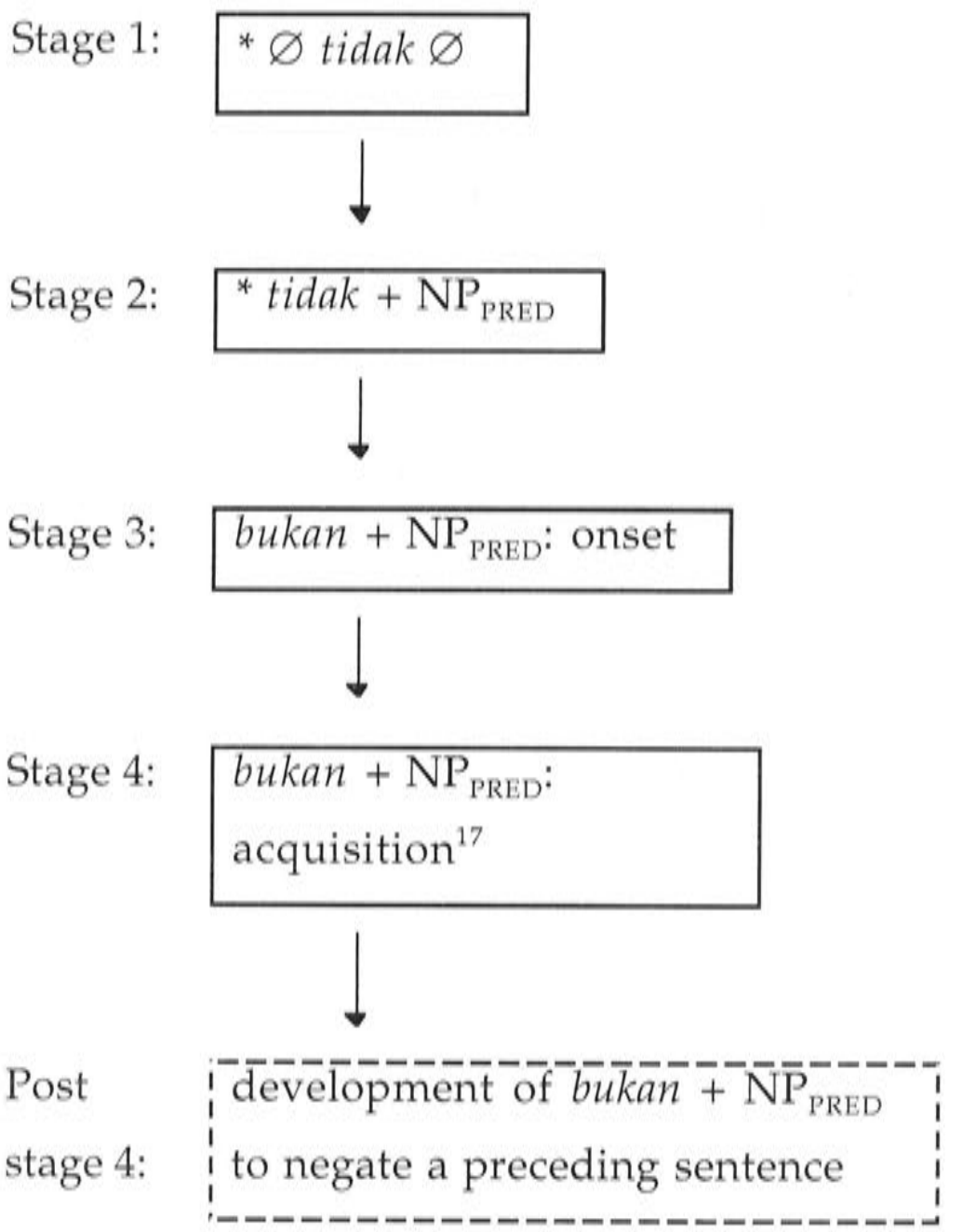
Diagram 4.14: The Development Stages of Adjectival Negation: Matt, Jane and Kate



For adjectival negation, the stages of development coincide with the route to acquisition, so that the structure is regarded as acquired at stage 4 of development.

The picture for the development of nominal negation is also similar: the learners progress through four stages in their journey to acquisition. The following diagram (Diagram 4.15) shows the stages of development.

Diagram 4.15: The Development Stages of Nominal Negation: Matt, Jane and Kate



I have already mentioned that the data for the acquisition of nominal negation in my study are more ambiguous than for the other forms of negation. It appears that nominal negation develops in four stages (Diagram 4.15), similar to the other structures. However, at stage 4, learners have yet to acquire the use of *bukan* + NP_{PRED} for the negation of a preceding sentence. As a result, I postulate that there would be one or more stages in the development of nominal negation to account for the subsequent acquisition of this part of the rule for nominal negation. The data in my study are not sufficient to comment on this further, but I have included this as the post stage 4 development.

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[17] As discussed previously, this is true for Matt and Kate, whereas Jane is in question.

4.3.2 Two Studies of the Acquisition of Negation: Dardjowidjojo and Adnan

Most studies on the acquisition of the syntax of negation have concentrated on English and other Indo-European languages, as L1 or L2. It appears there is little to compare between my study and the studies which look mainly at the positioning of verbal negation - whether it is pre-verbal or post-verbal (Hyltenstam 1977; Glahn et al. 2001), or external or internal to a sentence (Klima and Bellugi 1966; Cancino, Rosanky and Schumann 1978; Wode 1977, 1978, 1981). This section reviews two studies of Indonesian that were described in Chapter One - Dardjowidjojo (2000) and Adnan (1994, 1998).

Dardjowidjojo's (2000) study of the acquisition of Indonesian as L1 provides a contrast to my findings. With regard to negation, he finds that his L1 subject, Echa, acquires *bukan* before *tidak* (Dardjowidjojo 2000:132-133). At this age (two years), Echa is at the 'one word' stage, and she can only produce single word answers, Ø *bukan* Ø and Ø *tidak* Ø, rather than *bukan* + NP_{PRED} and *tidak* + VP_{PRED}.

Echa's order of acquisition for verbal negation and nominal negation is different from the acquisition order of the learners in my study. Matt, Jane and Kate all acquire the use of *tidak* for verbal and adjectival negation before *bukan*.[18] Dardjowidjojo's finding does not invalidate my results. The difference in the acquisition order may be a result of the different language environment - L1 in Dardjowidjojo's study as opposed to L2 in mine. Further study on the acquisition of Indonesian L1 negation would be

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[18] Dardjowidjojo looks only at the acquisition of *tidak*; he does not split this into verbal and adjectival negation.

necessary before concluding that the order of acquisition for Indonesian children is different from that for adult L2 learners.[19]

Adnan's (1994) study on the acquisition of Indonesian negation as L2 is especially important. He used longitudinal data from a single student at the Royal Australian Air Force (RAAF) School of Languages, collecting his data over a period of nine months. To determine acquisition Adnan used a criterion of 5 correct occurrences in a single interview, all of which must be different types. It may appear that Adnan is using stricter acquisition criteria in his study; however, his interviews were more than twice the length of mine (90 minutes as opposed to 30-45 minutes). Furthermore, all the interviews were conducted by one of the course lecturers, allowing a certain amount of control over the data collected.

Adnan does not present his results in detail: his report of the study presents the conclusions very briefly, stating only the sequence of acquisition that was observed. He does not chart his learner's acquisition, and provides only four examples of the learner's production. His findings are that Indonesian negation was acquired in the following sequence (extracted from Adnan 1994: 4, translation and subscript '$_{\text{PRED}}$' added):

1. *tidak* + VP_{PRED}	*tidak tahu*	'not know'
2. *tidak* + AP_{PRED}	*tidak sakit*	'not sick'

Because Adnan's report did not present much data or analysis, it is difficult to compare his results to the present study. Adnan's study appears to confirm the sequence of acquisition for verbal negation (*tidak* + VP_{PRED})

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[19] Dardjowidjojo's acquisition criteria may have had some effect on his conclusions. He counts a structure as acquired if the syntax resembles adult syntax, and if Echa's utterance could be understood by adults (Dardjowidjojo 2000, personal communication). He does not examine the possibility that, in some cases, Echa's utterances may be formulas.

and adjectival negation (*tidak* + AP_{PRED}). However, it seems there is no correspondence with regard to other forms of negation. Adnan (1994:4) states that nominal negation using *bukan* + NP_{PRED} was not acquired at all, though the student did produce some examples, albeit never confidently. This seems to contradict Adnan's conclusion in his later study (1998:29) that the acquisition of the general negator *tidak* is not a prerequisite for the acquisition of the nominal negator *bukan*. Adnan's claim that nominal negation (*bukan* + NP_{PRED}) was not acquired at all contrasts with my study, in which two out of the three learners acquired nominal negation, at least where the learners were negating an NP_{PRED} in their own utterance. On the other hand, the learners in my study were not able to produce nominal negation reliably when negating a preceding sentence. Because Adnan does not present his results in detail, it is not possible to compare his results for nominal negation with my own. As a result, I cannot determine whether the apparent difference in the acquisition of these different aspects of nominal negation had any effect on his determination that the structure *bukan* + NP_{PRED} was not acquired.

In summary, it is not possible to present a clear comparison between my results and Adnan's study, because he does not present sufficient details of his results. Further detailed study on the acquisition of *belum* + VP_{PRED}, *kurang* + VP_{PRED} and *tidak begitu* + AP_{PRED} structures will be most valuable.

4.4 Conclusion

In this chapter, it has been shown that there is a clear sequence of acquisition for negation, where adjectival negation is acquired after the acquisition of verbal negation, and nominal negation is only acquired after both verbal and adjectival negation are acquired. This sequence holds true for all three learners.

The chapter also describes in detail the development of the learners' IL through several stages, showing how their production changes from the beginning to the end of the data collection. This description shows that learners follow similar development paths for each negation structure.

After having investigated the acquisition and development of the syntax of negation in detail, the next chapter will present the acquisition and development of the syntax of adjectives by the learners.

CHAPTER FIVE

THE ACQUISITION AND DEVELOPMENT OF PREDICATIVE AND ATTRIBUTIVE ADJECTIVES

5.1 Introduction

In this chapter, the learners' acquisition of predicative and attributive adjectives in Indonesian is studied. First, I will investigate the acquisition and development of adjectives that function as predicates in sentences, and then adjectives that function as attributes in noun phrases. I will investigate the learners' development prior to and post acquisition, in particular where the learners' syntax changes form. In some circumstances when there is no obvious evidence of syntactic development, I will simply document the production of the learners' language. In order to make the analysis clearer I have divided adjectival structures into four groups, and each group is described in detail separately. The order of presentation is as follows:

I. Simple Predicative Adjectives
II. Complex Predicative Adjectives
III. Simple Attributive Adjectives
IV. Complex Attributive Adjectives

In Indonesian the function of an adjective placed after a noun can be ambiguous: it can function either as a predicate or an attribute to the noun itself.[1] When a learner places an adjective after a noun, I use a simple grammar test to determine whether the adjective functions as a predicate or

[1] In the TL intonation may be used to determine predicative adjective (marked by a falling intonation) and attributive adjective (marked by a rising intonation); however, the TL intonation can be unreliable in my data because the learners do not always use the appropriate intonation in their speech.

an attribute. This test is based on the structural position of the adjective in the sentence. The sentences below provide an illustration.

(1) Mobil *baru*.
car new
'The car is new.'

(2) *Mobil.
car
'Car.'

(3) Itu mobil *baru*.
DET car new
'That is a new car.'

(4) Itu mobil.
DET car
'That is a car.'

Baru 'new' in (1) functions as the predicate to its preceding noun, *mobil* 'car', and it is essential in the sentence; the noun alone (2) is ungrammatical.[2] In (3) *baru* 'new' functions as the attribute to its preceding noun, *mobil* 'car', and its existence is not necessarily required, because (4) is still grammatical. It should be noted as well that in (1) there is an intonational pause between the NP_{SUBJ} *mobil* and its NP_{PRED} *baru*, whereas in (3) there is no intonational pause between the noun *mobil* and its modifier *baru*.

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[2] Here I consider the complete sentence as the expected answer from the learners. However, it is possible that (2) is acceptable as a one word answer from a question; e.g.
Q: Apa yang baru? 'What is new?'
A: Mobil. 'Car.'

Both the predicative and attributive adjectives are divided into simple and complex. Table 5.1 below shows the framework of the structures of simple and complex predicative and attributive adjectives. It shows that in this chapter the term simple refers to occurrences when there is no unit embedded in another unit. See (5) and (8). The term complex refers to when there is a unit embedded in another unit. See (6), (7) and (9). In (6), for example, the phrasal adverb is embedded within an AP. There are two types of complex predicative adjectives, defined according to the position of the phrasal adverb within an AP. In this study they are referred to as type 1, $[A + Adv]_{AP:PRED}$, and type 2, $[Adv + A]_{AP:PRED}$, respectively.

Table 5.1: Simple and Complex Predicative and Attributive Adjective Structures[3]

Structure	Simple	Complex
Pred Adj	**S ---> NP_{SUBJ} + $[A]_{AP:PRED}$** (5) Anak cantik. child pretty 'The child is pretty.'	**Type 1) S---> NP_{SUBJ} + $[A + Adv]_{AP:PRED}$** (6) Anak itu cantiksekali. child DET pretty very 'The child is very pretty.' **Type 2) S ---> NP_{SUBJ} + $[Adv + A]_{AP:PRED}$** (7) Anak itu sangat cantik. child DET very pretty 'The child is very pretty.'
Attr Adj	**NP ---> N + A + (DET)** (8) anak cantik (itu) child pretty (DET) '(the) pretty child'	**NP ---> N + $[REL + A]_{REL\ CL}$ + (DET)** (9) anak yang cantik(itu) child REL pretty (DET) (LIT: 'the child who is pretty') (FOR: 'the pretty child')

[3] Unless otherwise stated, the structures represent the order of the units, not the formal elaboration of the phrase structures of the TL.

5.2 The Acquisition of the Syntax of Adjectives

In general, the three learners follow similar paths to acquisition for the predicative adjectives and the attributive adjectives. They acquire the simple structures before the complex ones, although the timing of accquisition varies among learners. See the Table 5.2 below.

Table 5.2: The Acquisition of Predicative and Attributive Adjectives by Week

Structures	Matt	Jane	Kate
Simple Predicative Adj	week 8	week 9	week 9
Complex Predicative Adj Type 1:	week 12	week 21	week 37
Complex Predicative Adj Type 2:	week 37	week 39	week 41
Simple Attributive Adj	week 12	week 12	week 24
Complex Attributive Adj	week 68	week 45	week 68

Table 5.2 shows the overall picture of acquisition for all the structures being investigated. The table also depicts the first week in which each of the learners has fulfilled the criteria for acquisition used in this study. It shows that all three learners acquire the simple predicative and then simple attributive adjectives first (shaded cells); the only variation being in the timing of acquisition rather than the sequence of acquisition. In other words, my learners all follow the same order: the acquisition of simple predicative adjective is quite early, around week 8 or week 9; followed by the simple attributive adjective which is acquired from 3 to 15 weeks later.

The sequence for the more complex structures shows that there is a similar pattern but considerable variation between the learners in their timing of acquisition. For example, Matt acquires the complex predicative adjective type 1: $[A + Adv]_{AP:PRED}$ in week 12, followed by Jane (week 21) and Kate (week

37). This means that for this structure there is a difference of more than six months between the acquisition times of the first and last learners. In respect of the sequence of acquisition for complex predicative adjective type 2 [Adv + A]$_{AP:PRED}$, it appears that all learners acquire the structure at about the same time - Matt in week 37, Jane in week 39, and then Kate in week 41.

In general, Jane and Matt acquire adjective syntax at a faster rate than Kate (see Table 5.2), although Matt and Jane adopt different approaches to learning: Jane is an industrious learner who tries to achieve accuracy; whereas Matt gives priority to getting his message across at the cost of sometimes making mistakes. Nonetheless, their rate of acquisition is broadly similar, although with certain structures one will acquire these well in advance of the other. For example, Jane acquires the complex attributive adjective long before Matt.

Kate is the slowest among the three learners; she does not talk as much as the others. It appears that she gives priority to correctness rather than fluency, and she gives the impression that she is rather timid. However, this does not mean that she does not acquire the structures as well as the other two learners; she acquires the TL grammar in her own time.

5.3 The Acquisition of Simple Predicative Adjective: An Overview

It is interesting that all of the learners acquire the simple predicative adjective structure at about the same time. This is relatively early compared to other structures. It is also noticeable that Matt, who had the advantage of earlier formal input, does not show much difference from his two fellow learners.

Table 5.3 below shows that the simple predicative adjective is the earliest adjective structure to be acquired by the learners (cf. Table 5.2). Matt acquires

the simple predicative adjective in week 8, followed by Jane and Kate a week later.

Table 5.3: The Accuracy Rates at the Time of Acquisition for Simple Predicative Adjective: Matt, Jane and Kate

Structure	Matt	Jane	Kate
Simple Predicative Adjective	week 8	week 9	week 9
Percentage	100%	100%	100%

It is notable that at the point of time when the learners acquire the simple predicative adjective rule of the TL, they all achieve 100% correctness. Although correctness does not directly translate into acquisition, it illustrates their competence with the TL grammar at the time. This level of accuracy continues to the last data collection in week 68 (except for a couple of slips by Kate); demonstrating that the predicative adjective phrase structure rule is very stable in their language production.

5.3.1 The Acquisition of Simple Predicative Adjective: Matt

Matt acquires the simple predicative adjective quite early. Interestingly, from his very first production until the end of the data collection, Matt's production is error free. Table 5.4 shows that Matt uses predicative adjectives from week 2, but acquisition does not occur until 6 weeks later (week 8). After acquisition, Matt continues to use the already established grammar at nearly every interview and his occurrences are quite frequent. The following section will discuss the detail of Matt's IL grammar leading up to acquisition as well as his development after acquisition.

Table 5.4: The Acquisition of Simple Predicative Adjective: Matt

	Matt	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2	[2/2]	[1] rp
4	[1/1]	[1] rp
8	4/4	1
9	[1/1]	[1]
11		
12	[2/2]	[1]
13	3/3	1
15	[2/2]	[1]
16	[2/2]	[1]
17	[2/2]	[1]
21	3/3	1
24	[2/2]	[1]
27	[1/1]	[1]
30		
33	5/5	1
37	6/6	1
39	[2/2]	[1]
41	[2/2]	[1]
45	4/4	1
51	[1/1]	[1]
53	[2/2]	[1]
68	5/5	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

rp = repertoire

In week 1, Matt did not produce the simple attributive adjective structure. In that week no context was provided for Matt to use this structure: the data collection lasted approximately five minutes and was mainly concerned with simple formulas such as his name, address and greetings. See (10), (11) and (12) respectively.

(10) Nama saya Matt.
name 1Psg Matt
'My name is Matt.'

(Mw1s2)

(11) Saya tinggal di Cook street.
1Psg live in Cook street
'I live in Cook street.'

(Mw1s4)

(12) Selamat pagi. Apa kabar?
good morning what news
'Good morning. How are you?'

(Mw1s6)

In week 2, Matt produces two examples of the simple predicative adjective. He was asked whether he was happy that his wife was teaching in the university (13); in this case the interviewer provided the lexical item *senang* 'happy', which Matt could have used in his reply whether he was happy or not. Instead, he opted to say that his wife was good (14). It appears at this point of time his usage of simple predicative adjective is still formulaic; for example, in (14), Matt's answer is not very coherent with the question being asked and he appears to use the lexical item *bagus* 'good' as repertoire. It is worth noting that the lexical item *bagus* 'good' is used frequently in the class, in particular by the tutors as a word of encouragement for the students.

Therefore, at this time, since it is very early in the course, Matt is probably using formulaic language.

(13) Iw: Apa-kah Matt senang istri mengajar di universitas?
Q-marker Matt happy wife teach at university
'Are you happy your wife is teaching in the university?'

(14) Ya, istri bagus.
yes wife good
(LIT: 'Yes, wife is good.')
(FOR: 'Yes, my wife is good.')

(Mw2s308)

In week 4 Matt produces only one example of a simple predicative adjective. I assume that Matt's production is still formulaic, because his usage of *baik* 'good' in (15) seems to be out of context. In this instance he says that 'Yes Asia is good,' when initially he wanted to tell his conversation partner where he lived before. The evidence suggests that from week 2 to week 4, Matt's usage of simple predicative adjective may not be analysed yet; instead he repeats *bagus* 'good' or *baik* 'good' from the class drills.

(15) Dahulu saya tinggal er (...). Ya, di Asia baik.
past 1Psg live er yes at Asia good
'In the past I lived er (...). Yes, Asia is good.'

(Mw4s52)

Week 8 is possibly the point where Matt's usage of the simple predicative adjective becomes non-formulaic. He produces four correct examples, out of four available contexts, and uses four different lexical items: *mudah* 'easy', *jelek* 'bad', *susah* 'difficult/sad' and *bagus* 'good'. Looking closely at the way Matt produced the simple predicative adjectives: they are contextually

proper and coherent to the flow of the conversation; for example, in (16) and (17).

(16) Iw: Apa belajar bahasa Inggris sukar?
Q study language English difficult
'Is learning English hard?'

(17) ... er bahasa Indonesia dan bahasa Inggris susah.
... er language Indonesia and language English difficult
'... Indonesian and English are difficult.'

(Mw8s293)

In (16) the interviewer asks about the difficulty of learning English. Matt then expresses his view that Indonesian and English are difficult (17); and in (18) when talking about the timetable for the course, Matt tells the interviewer that the organisation is good, and he attends the Monday lecture.

(18) Ya organisasi er bagus. Saya pergi hari Senin.
yes organisation er good. 1Psg go day Monday
'Yes, the organisation is good. I go on Mondays.'

(Mw8s325)

I regard these examples as clear evidence that Matt has acquired the simple predicative adjective in the TL. He does not show hesitation in producing the expressions he wants to convey in the conversation with the interviewer. He is a confident communicator, and when he is not sure how to say something in the TL he tries hard to express it without worrying about making mistakes.

After acquisition in week 8, Matt seems to sustain the rule of the simple predicative adjective, and his productions are more varied lexically, because

the formal input provided a greater variety of lexical items as well. It is possible that his productions signal that Matt's vocabulary is becoming richer than in the previous weeks; it is also possible that the topic of the conversation requires him to use different adjective lexical items, because he likes to talk about various topics. For example in (19) and (20) Matt's production of the sentences was unprompted and not part of the planned topic of the conversation ('preparation for the semester test'). Without preparation, the interviewer and Matt were engaged in a conversation about 'going to church'; and Matt wanted to express his opinion about the church's philosophy and activity.

(19) Filosofi gereja bagus.
philosophy church good
'The church philosophy is good.'

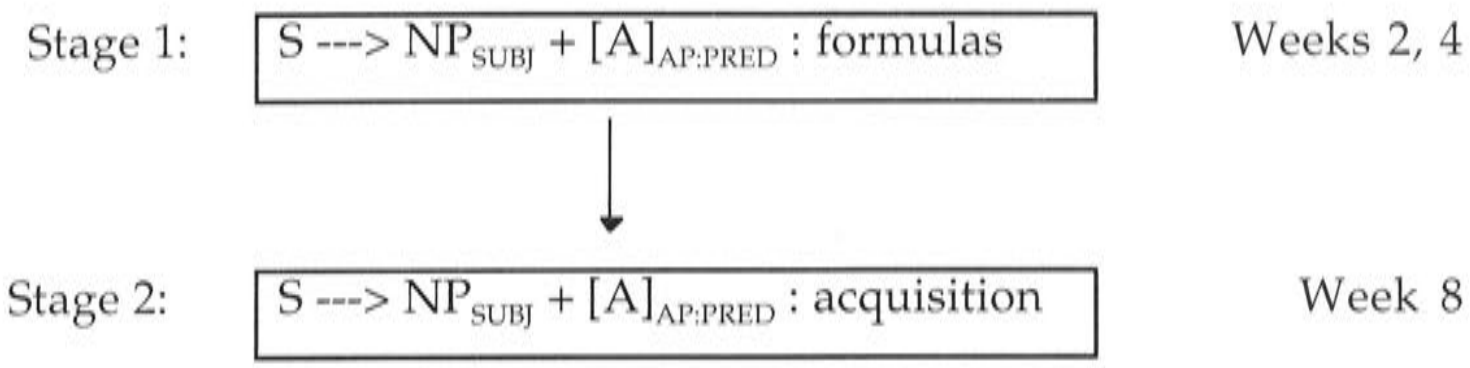
(Mw13s264)

(20) Ya activiti bagus.
yes activity good
'Yes, the activity is good.'

(Mw13s286)

To sum up: Matt's stages of acquisition and development of the simple predicative adjective can be represented in Diagram 5.1:

Diagram 5.1: The Acquisition and Development Stages[4] of Simple Predicative Adjective: Matt



Stage 1: Matt produced correct structures of simple predicative adjective, but they are categorised as formulas, because his productions are out of context, and also not coherent with the topic of conversation (week 2 - week 4).

Stage 2: Matt has acquired the rule of simple predicative adjective (week 8):[5] his productions are contextually proper and lexically varied.

5.3.2 The Acquisition of Simple Predicative Adjective: Jane

Jane also acquires the structure of simple predicative adjective relatively early. Like Matt, prior to her acquisition she has a formulaic stage. Table 5.5 shows that Jane's very first production of the simple predicative adjective was in week 4, although her acquisition did not occur until week 9. After acquisition, Jane continues to use the simple predicative adjective structure with ease, and the occurrences are very frequent and also error free. The development of Jane's IL leading up to acquisition and also development after acquisition will be discussed in the following section.

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[4] Recall that the stages of development described in this study differ from the developmental stages proposed by Pienemann (1998:116). Each of Pienemann's stages relates to the development of a different language structure, related to the gradual development of the learner's processing skills. In this study, the stages describe the emergence of a particular structure, without relating this to the development of subsequent structures.

[5] Between week 4 and week 8, there might have been an onset period but there are no data to show this.

Table 5.5: The Acquisition of Simple Predicative Adjective: Jane

	Jane	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4	4/4	1 rp
8	[2/2]	[1] rp
9	3/3	1
11	[2/2]	[1]
12	3/3	1
13	[1/1]	[1]
15	9/9	1
16	[2/2]	[1]
17	5/5	1
21	8/8	1
24	5/5	1
27	4/4	1
30	4/4	1
33	9/9	1
37	4/4	1
39	[2/2]	[1]
41	[1/1]	[1]
45	6/6	1
51	3/3	1
53	3/3	1
68	5/5	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

rp = repertoire

In weeks 1 and 2 there were no contexts at all for Jane to produce any kind of simple predicative adjective structures. The interviews for these weeks only lasted about 5 minutes and were confined to greetings, introductions, and telling where she lived - similar to Matt's production in week 1 (see (10) - (12) above). It is likely that at this stage Jane had not analysed how the Indonesian language worked, and that she treated each sentence as 'a single unit'. In other words, she was still at the repertoire stage.

In week 4 it is most likely that Jane is still at the formulaic stage, treating the sentences as 'single units', or unanalysed chunks. All of the utterances Jane produced were repeated from the formal instruction, either from the lectures, from textbook drills in the tutorials (see 25), or from listening to cassettes in the language laboratory. At first glance, Jane seems to be able to produce a simple predicative adjective statement (21), or question (22); however, Jane produces these sentences out of context, so that the utterances do not fit in with the conversation topic. For example, after mentioning her own telephone number, she switched to asking whether the room is clean (23) and she also answered her own question (24). All of these utterances were produced together, without giving her conversation partner the chance to participate. From these examples it can be concluded that her predicative adjective sentences are repertoire from the class drill exercises.

(21) Meja itu besar.
table DET big
'The table is big.'

(Jw4s23)

(22) Apa meja itu besar?
Q table DET big
'Is the table big?'

(Jw4s23)

(23) *Saya nomor telepon uhm... no. Apa kamar itu bersih?
1Psg number telephone uhm no Q room DET clean
'My telephone number ... no. Is the room clean?'

(Jw4s23)

(24) Itu bersih.
DET clean
'It is clean.'

(Jw4s23)

(25) Apa kamar tunggu itu bersih?
Q room wait DET clean
'Is the waiting-room clean?'

(Johns 1989:65)

In week 8, Jane produces two simple predicative adjectives which also seem to be examples of repertoire. Jane was asked 'How are you?' by her conversation partner (26) and her answer is 'I have sinusitis and a sore throat.' (27).[6] This is an awkward answer because she was physically well at the time of the recording.[7] I treat this as an out-of-context answer; furthermore it appears to resemble a question (28) and answer (29) exercise from the textbook (with an expansion). Although, this is a proper TL sentence, it demonstrates that her production is still at the repertoire stage.

(26) K: Apa kabar?
what news
'How are you?'

---

[6] In Indonesian, the sentence is a predicative adjective construction, but in the English translation it is not.

[7] It is also possible that Jane tries to use the most complicated answer she can control.

(27) Saya sakit hidung dan kerongkongan.
1Psg sick nose and throat
'I have sinusitis and a sore throat.'

(Jw8s5)

(28) Kamu sakit apa? (answer: kerongkongan)
2Psg sick what
'What is wrong with you?'

(29) Saya sakit kerongkongan.
1Psg sick throat
'I have a sore throat.'

(Johns 1989: 71)

By week 9, Jane is analysing the structure of simple predicative adjectives. Unlike the previous weeks, she now produces the structure contextually and naturally in line with the flow of her conversation with the interviewer. Jane shows that she can also use the structure in an appropriate context. This demonstrates that her production is not a repetition from the class drill any more; instead her constructions are relevant to her communication needs, for example in (30) and (31).

(30) Kemarin anak saya sakit uhm tinggal di rumah.
yesterday child 1Psg sick uhm stay at home
'Yesterday my child was sick uhm he stayed at home.'

(Jw9s20)

(31) Di Amsterdam rumah murah.
at Amsterdam house cheap
'In Amsterdam housing is cheap.'

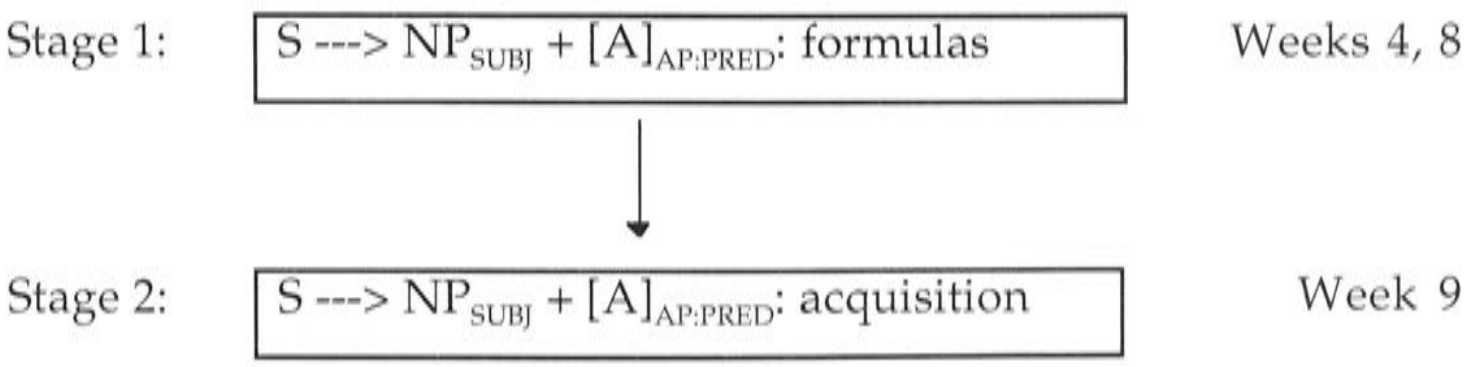
(Jw9s170)

Jane told her conversation partner (30) that her child was sick yesterday, therefore he stayed at home. Her usage of the structure is most appropriate because it was late autumn approaching winter, therefore a lot of people were sick. The other instance of relevant production was in (31) where Jane told her conversation partner that housing in Amsterdam was cheap. She had first-hand experience on this issue, because she had lived there before. From these examples, it is clear that Jane's simple predicative adjectives are analysed, contextually proper, and spontaneously produced. Jane also produces three correct examples in the three available contexts, so she has fulfilled the acquisition criteria.

After acquisition Jane continues to produce simple predicative adjectives error-free until the end of the data collection. Her adjective lexical items are more varied, which is in line with the provided formal input.

To sum up: Jane's stages of acquisition and development of simple predicative adjective can be represented by Diagram 5.2:

Diagram 5.2: The Acquisition and Development Stages of Simple Predicative Adjective: Jane



Stage 1: Jane produces the correct structure of the simple predicative adjective, but her productions are categorised as formulas, because they are out of context, and appear to be the repertoire of the class drills (week 4 - week 8).

Stage 2: Jane has acquired the rule of simple predicative adjective (week 9). Her rule applications are contextually proper and lexically varied.[8] After acquisition Jane is able to sustain the structure rule.

5.3.3 The Acquisition of Simple Predicative Adjective: Kate

Kate also acquires the simple predicative adjective relatively early, and, like Matt and Jane, she has a formulaic stage prior to her acquisition. Table 5.6 shows that her very first production of the structure was in week 4, although she did not acquire it until week 9 (at the same time as Jane). She seems to retain the structure after acquisition until the end of the data collection and is almost error-free (except once in each of weeks 37 and 41).

In week 1 and week 2, there were no contexts for Kate to produce the simple predicative adjective. Like her two fellow learners, Kate was mainly practising greetings, introducing herself, and telling where she lived. Compare this to Matt (10) - (12) above.

In week 4, although Kate produces some examples of simple predicative adjectives, her productions are unanalysed chunks and produced out of context. For example, after talking about telephone numbers with her conversation partner, she suddenly asks her conversation partner whether the table is big (32).

(32) *Apa telepon nomor Anda? Apa meja itu besar?
what telephone number 2Psg what table DET big
'What is your telephone number?' 'Is the table big?'
(Kw4s22)

---

[8] Jane's onset period was also not traceable prior to her acquiring the predicative adjective structure.

Table 5.6: The Acquisition of Simple Predicative Adjective: Kate

	Kate	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4	3/3	1 rp
8	[2/2]	[1] rp
9	3/3	1
11	3/3	1
12	5/5	1
13	[2/2]	[1]
15	3/3	1
16	8/8	1
17	5/5	1
21	[2/2]	[1]
24	5/5	1
27	[2/2]	[1]
30	[2/2]	[1]
33	4/4	1
37	7/8	0.87
39	4/4	1
41	[1/2]	[0.5]
45	5/5	1
51	[1/1]	[1]
53	[1/1]	[1]
68	9/9	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

rp = repertoire

On another occasion, after talking about her hair, she asked her partner what was the matter with her (33).

(33) Rambut saya er rambut saya uhm uhm. Engkau sakit apa?
hair 1Psg er hair 1Psg 2Psg sick what
'My hair er my hair is uhm uhm. What is the matter with you?'
(Kw4s28)

The simple predicative adjectives produced appear to be copied from class or textbook drills, and thus constitute learned units rather than analysed utterances.

In week 8 Kate is very likely still at the repertoire stage, where she produces sentences copied from class exercises. For example, in (35) Kate told her conversation partner that her children had sinusitis and a sore throat. She did not appear to mean it, as she actually repeated the phrase used by her conversation partner, by substituting the subject pronoun from *saya* 'I' (34) with *anak-anak saya* 'my children' (35).[9]

(34) J: Er saya er sakit hidung dan kerongkongan.
er 1Psg er sick nose and throat
'I have sinusitis and a sore throat.'

(35) Uhm anak-anak saya uhm ada uhm uhm... Anak-anak saya
uhm child-child 1Psg uhm has uhm uhm child-child 1Psg
sakit hidung dan kerongkongan.
sick nose and throat
'My children uhm have uhm uhm... My children have sinusitis and sore throat.'
(Kw8s6)

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[9] It is also probable that, at this stage, Kate's limited production is attributable to her limited vocabulary, rather than lack of analysed structure.

By week 9 Kate acquires the simple predicative adjective: she meets the criteria for acquisition set in this study; that is, she spontaneously produces three correct examples in three available contexts, and she uses different adjective lexical items in each context. For example, sentences (36), (37) and (38) show a variety of adjective lexical items, all of which follow the target language grammatical rules and are used spontaneously. In (36), Kate's son was happy (because her elder brother brought a new computer for him).

(36) Anak laki-laki saya gembira.
child male-male 1Psg happy
'My son was happy.'

(Kw9s70)

In (37) her brother's girlfriend had to return to England because her mother was sick, and in (38) she commented that housing was expensive in Germany. From these instances, it appears that Kate has acquired the simple predicative adjective because her rule application is contextually appropriate, spontaneous and lexically varied.

(37) Ibu dia sakit.
Mother her sick
'Her mother was sick.'

(Kw9s112)

(38) Di Jerman rumah mahal.
at Germany house expensive
'Housing is expensive in Germany.'

(Kw9s289)

In subsequent weeks, up until the end of the interviews, Kate continues to apply the simple predicative adjectives rule that has been acquired in week 9

very well. It is worth noting that in week 37 there was an instance when Kate's error appears to be caused by her usage of an inappropriate lexical item rather than misapplying the rule of the TL. In (39), Kate's conversation partner asked her why the man (in one of the pictures they were looking at) covered his head with a sock, and Kate replied **Dia kurus uhm rambutnya.* (40) instead of the TL expression *Dia jarang rambutnya* 'His hair is thin.' (LIT: 'His hair is sparse.'). This is categorised as error because her lexical choice is contextually inappropriate.

(39) J: Mengapa dia memakai kaos kaki di atas kepala-nya?
why 2Psg wear sock at top head-his
'Why is he wearing a sock on his head?'

(40) * Dia kurus uhm rambut-nya. ((laugh))
3Psg thin uhm hair -his
(LIT: 'He skinny uhm his hair.')
(FOR: 'His hair is thin.')
(Kw37s93)

To sum up: Kate's stages of acquisition and development of simple predicative can be represented by Diagram 5.3:

Diagram 5.3: The Acquisition and Development Stages of Simple Predicative Adjective: Kate

Stage 1: $S \dashrightarrow NP_{SUBJ} + [A]_{AP:PRED}$: formulas — Weeks 4, 8

↓

Stage 2: $S \dashrightarrow NP_{SUBJ} + [A]_{AP:PRED}$: acquisition — Week 9

Stage 1: Kate produced the correct structure of simple predicative adjective, but her production is categorised as formulas, because the contexts provided did not oblige her to use simple predicative adjective structures (week 4 - week 8).

Stage 2: Kate has acquired the rule of the simple predicative adjective (week 9). Her rule applications are contextually proper and lexically varied.[10] Kate is able to sustain the structure after acquisition.

5.3.4 The Acquisition of Simple Predicative Adjective: Summary

The IL grammar for the learners on their routes to acquisition of simple predicative adjectives has been presented. It appears that all of the learners have a formulaic stage prior to acquisition. Noticeably, the timing of the acquisition was about the same for the learners: week 8 for Matt, while for Jane and Kate it occurred a week later. Matt's earlier input (see Chapter Two) appears not to have had much influence on his acquisition time.

Diagram 5.4 shows the acquisition and development pattern of Matt, Jane and Kate.

Diagram 5.4: The Acquisition and Development of Simple Predicative Adjective: Matt, Jane and Kate

Stage 1: $S \dashrightarrow NP_{SUBJ} + [A]_{AP:PRED}$: formulas

↓

Stage 2: $S \dashrightarrow NP_{SUBJ} + [A]_{AP:PRED}$: acquisition

---

[10] Once again, Kate's onset period was not traceable prior to acquiring the predicative adjective.

Matt, Jane and Kate firstly had a formulaic stage where they all produced simple predicative adjectives sentences out of context (stage 1); this was followed by acquisition where the productions were analysed (stage 2).

5.4 The Acquisition of Complex Predicative Adjective: An Overview

As mentioned at the beginning of ths chapter, the term complex is used to refer to when there is a unit embedded in another unit, such as in sentences (7) and (8) in this chapter. In this section, the complex predicative adjective refers to phrasal adverbs placed either after or before the adjective lexical items within APs. The notations $[A + Adv]_{AP:PRED}$ and $[Adv + A]_{AP:PRED}$ are used respectively. For practical reasons, these two types of complex predicative adjective will be dealt with together.

It is worth noting that the acquisition criteria needed to be modified somewhat to account for the formal input received by the learners. The number of phrasal adverbs which follow the adjective lexical items is quite small - *benar* 'really', *sama sekali* 'entirely' and *sekali* 'very'. At this stage the learners would really only have been aware of one: *sekali* 'very'. And the number of phrasal adverbs which precede the adjective lexical items is not great either: *sangat* 'very', *sedikit* 'a little bit' and *terlalu* 'too'. The learners would really only have been aware of one or two: *sedikit* 'a little bit' and *terlalu* 'too'. For these reasons, the requirement to use three different lexical items is not used for the phrasal adverbs, but it does still apply to the adjective lexical items.

Table 5.7 below shows that the acquisition of complex predicative adjectives is later than the acquisition of simple predicative adjectives (as previously shown in Table 5.3). Matt acquires the structure of type 1 quite early (week 12) compared to Jane (week 21) and Kate (week 37). For the acquisition of the

complex predicative adjective, type 2 is even later than type 1: Matt acquires it in week 37, Jane week 39, and Kate week 41.

Table 5.7: The Accuracy Rates at the Time of Acquisition for Complex Predicative Adjective Type 1 and Type 2

Structure	Matt	Jane	Kate
Complex Pred Adj Type 1	week 12	week 21	week 37
Percentage	80%	67%	100%
Complex Pred Adj Type 2	week 37	week 39	week 41
Percentage	67%	67%	100%

At the point in time when the learners are considered to have acquired the complex predicative adjective, Kate achieves the highest accuracy (100% for both types), followed by Matt (80% for type 1 and 67% for type 2) and Jane is last (67% for both types). Although Kate acquires the structure quite late, she shows that she can perform better than the other two learners when she is ready, and she is also able to sustain the acquired structures well after acquisition. Some individual issues will be discussed in more detail in later sections.

5.4.1 The Acquisition of Complex Predicative Adjective Type 1: Matt

Matt acquired the complex predicative adjective structure type 1 quite early (week 12). Interestingly, after acquisition Matt made some errors in weeks 17 and 24. Table 5.8 below shows Matt's performance during the data collection period. The following section will discuss his acquisition and development in more detail.

Table 5.8: The Acquisition of Complex Predicative Adjective Type 1: Matt

	Matt	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4		
8	[1/1]	[1]
9		
11	[1/1]	[1]
12	4/5	0.8
13	5/5	1
15	[2/2]	[1]
16	4/4	1
17	3/5	0.6
21		
24	[0/1]	[0]
27	[2/2]	[1]
30	[2/2]	[1]
33	4/4	1
37	6/6	1
39	3/3	1
41	5/5	1
45	[2/2]	[1]
51	[1/1]	[1]
53	[2/2]	[1]
68	4/4	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In weeks 8 and 11 Matt produces the complex predicative adjective type 1. Since there is only one example on each occasion, it is unclear whether he has worked out this structure. I do not rule out the possibility that these sentences were learned from the textbook using a substitution drill strategy (43a-b), although the production of the structure could be categorised as onset, because Matt did not copy word for word as he would if he were using formulas.

Looking at the contexts, the rule applications on this occasion are both appropriate: in (41) Matt commented that the interviewer was very busy, because there were a lot of students to handle, and in (42) Matt commented that his children were hard workers and they were very focused in what they wanted to achieve.

(41) Engkau sibuk sekali.
2Psg busy very
'You are very busy.'

(Mw8s22)

(42) Mereka fokus sekali.
3Ppl focus very
'They are very focused.'

(Mw11s103)

Compare the expansion drill in the students' textbook:

Expansion drill: Expand the following sentences by adding the word *sekali* after the adjectives:

(43) a. Anak itu pucat.
child DET pale
'The child is pale.'

becomes:

(43) b. Anak itu pucat sekali.
child DET pale very
'The child is very pale.'

(Johns 1989:73)

I consider week 12 to be when Matt acquires the complex predicative adjective type 1 using the most common adverb *sekali* 'very' in the structure. Matt's production is spontaneous, the rule applications contextually correct and lexically varied.

For example, in (44) and (45) Matt's usage of the adverb *sekali* 'very' is appropriate: he and his conversation partner are talking about how often they visited their families. Matt said that he did not visit his grandparents very much because they live in a small country town, and he also told his partner that they are very old.

(44) Saya mengunjungi kakek dan nenek sedikit sekali.
1Psg visit grandpa and grandma a little very
'I visit grandpa and grandma very little.'

(Mw12s44)

(45) Mereka hidup tua sekali.
3Ppl live old very
(LIT: ' They live very old.')
(FOR: 'They are very old.')

(Mw12s56)

Out of 5 obligatory contexts, he fulfils 4. This is clear evidence that he can execute the phrasal adverb *sekali* 'very' at the right place and in the right contexts. The conclusion can be drawn that he has acquired the structure of complex predicative adjective type 1.

Matt produced one error in week 12 (46); here, he doubles the adverb *sekali*, presumably intending to intensify the meaning.

(46) * Liberal party menjadi individualistic sekali-sekali.
liberal party become individualistic very very
yes very very individualistic. ((laugh))
yes very-very individualistic
(LIT: 'Liberal Party becomes individualistic very-very.')
(FOR: 'Liberal Party becomes very individualistic.')

(Mw12s78)

However, the TL does not allow this because *sekali-sekali* means 'once.' In this context he was talking about the state election and he was telling his partner why he preferred Labor over the Liberal Party; his argument was that the Liberal Party would look after their own supporters rather than Australians as a whole.

In week 13 Matt uses the structure of $[A + Adv]_{AP:PRED,}$ the structure pattern established in week 12. For example, in (47) he applied two different adjectival adverbs in a sentence. This underlines the assertion that Matt's usage of an adverb following the adjective is analysed. He was saying how very stressful it could sometimes be to study as well as work, when having a family; but mostly he only had a little stress.

(47) Kadang-kadang saya stres sekali, tetapi mostly stres sedikit.
sometimes 1Psg stress very but mostly stress a little
'Sometimes I am very stressed, but mostly only a little.'

(Mw13s86)

The usage of *stres sekali* 'very stressed' contrasts to *stres sedikit* 'a little stressed', shows that Matt can contrast the meaning using different vocabulary and he can also apply the rules appropriately in this context. It

supports the view that Matt has acquired the structure, showing that he is using his understanding of the TL language rules in his production, rather than formulas.

In week 17, Matt produces two instances that are different from his previous productions. He now doubles the adjective lexical items, and then follows this by a phrasal adverb (48) and (49).

(48) * Dulah anak bagus-bagus sekali.
Dulah child good-good very
(LIT: 'Dulah is a very good good child.')
(FOR: 'Dulah is a very very good child.')

(Mw17s 181)

(49) * Laki-laki menjual satu gelang kepada saya harga murah-murah sekali.
male-male sell one bracelet to 1Psg price cheap-cheap very
(LIT: 'The man sold a bracelet to me with very cheap cheap price.')
(FOR: 'The man who sold one bracelet to me gave very very cheap price.')

(Mw17s145)

In (48) and (49), contextually Matt is required to apply *bagus sekali* 'very good' and *murah sekali* 'very cheap' instead he opts to say **bagus-bagus sekali* 'very good good' and **murah-murah sekali* 'very cheap cheap' respectively. In formal Indonesian, doubling of the adjective is not permissible if there is a phrasal adverb present. I speculate that the second adjective in these contexts is meant to intensify the meaning of the first adjective. This is possibly development in Matt's IL grammar: instead of using $[A+Adv]_{AP:PRED}$, he opts to use $[A+A+Adv]_{AP:PRED}$.

Matt's grammatical activity in week 17 is an interesting development. He uses different avenues to convey his communication needs for intensifying the meaning. His strategy is to double the adjective lexical items followed by a phrasal adverb. In this case, I do not rule out the possibility of transfer from the L1 expression 'very very good' or 'very very cheap' - this is arguable since his L1 would allow the doubling of the phrasal adverb but not the adjective lexical item itself to intensify the meaning. It is also possible that Matt is experimenting with doubling the adjective, which had been introduced in the course (week 6 - see Appendix A). In Indonesian, doubling the adjective is used to indicate that the noun to which it refers is plural (Johns 1989:118), but Matt is using it here to provide emphasis.

In week 24 Matt misapplies a grammatical category. He treats the noun *pemudi* 'young girl' as an adjective in his IL (50), and adds an adverb *sekali* 'very' after the noun *pemudi*. I believe this is a case of Matt not knowing the word *muda* 'young', rather than his inappropriate application of the structure rule.

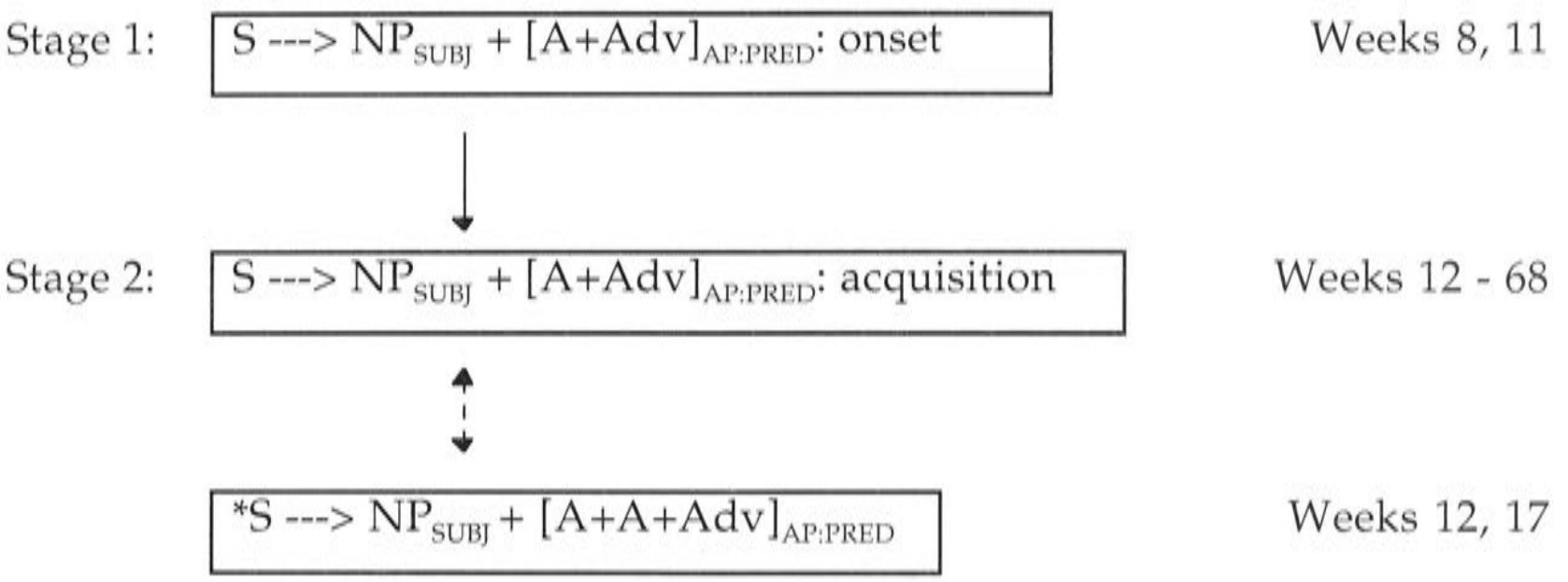
(50) * Anda pemudi sekali.
2Psg girl very
(LIT: 'You are very girl.')
(FOR: 'You are very young.')

(Mw24s115)

In summary, Matt does not have difficulty in acquiring the complex predicative adjective type 1, and once he acquires it he is able to sustain it. I speculate that in week 17 Matt demonstrates development after acquisition. His error in week 24 could be a result of Matt not knowing the word for 'young' in the TL, and I regard this as inappropriate lexical usage rather than inappropriate structure application.

Diagram 5.5 shows Matt's stages prior to acquisition and development of complex predicative adjective type 1:

Diagram 5.5: The Acquisition and Development Stages of Complex Predicative Adjective Type 1: Matt



Stage 1: Matt is able to apply the rule, but his production is categorised as onset because there is one occurrence in each interview (i.e. week 8 and week 11).

Stage 2: Matt has fulfilled the acquisition criteria in this study (week 12).

The broken arrow indicates that Matt misapplies the rule, once at the time of acquisition (week 12) and twice after acquisition (week 17), but he also applies the rule appropriately in this period. Here, Matt appears to be experimenting with how to express emphasis in the TL.

5.4.2 The Acquisition of Complex Predicative Adjective Type 2: Matt

Although Matt's usage of complex predicative adjective type 2 is not frequent, it is still possible to interpret the data based on his production. Matt first uses the structure in week 8, but he does not acquire it until week 37. The following discussion of Matt's production is based on the data in Table 5.9, showing his frequency of production.

Table 5.9: The Acquisition of Complex Predicative Adjective Type 2: Matt

	Matt	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4		
8	[1/1]	[1]
9		
11		
12		
13		
15		
16		
17		
21		
24		
27	[1/1]	[1]
30		
33	[1/1]	[1]
37	2/3	0.67
39		
41	[1/1]	[1]
45		
51	[2/2]	[1]
53		
68	[1/1]	[1]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Matt's first production of the complex predicative adjective type 2 is in week 8. He comments on the interviewer's work - that a lot of marking has to be done (51). His production is quite natural and contextually appropriate; it could be this marks the onset of the complex predicative adjective type 2.

(51) Engkau terlalu sibuk.
2Psg too busy
'You are too busy.'

(Mw8s26)

It is notable that, although his production of $[Adv + A]_{AP:PRED}$ is infrequent, Matt shows onset in his structure application of the rule; for example in weeks 27 (52) and 33 (53). In both instances Matt uses the phrasal adverb *terlalu* 'very' appropriately: in (52) he told the interviewer he did not eat much cheese while he was in Nigeria because it was too expensive, and in (53) he complained that he could not finish the test on time, because the time allocation was insufficient.

(52) Di Nigeria keju terlalu mahal.
at Nigeria cheese too expensive
'In Nigeria cheese is too expensive.'

(Mw27s110)

(53) Di test itu time terlalu kecil.
at test DET time too small
'In the examination the time was too short.'

(Mw33s151)

In week 37 Matt acquired the structure of complex predicative adjective type 2. There were three available contexts and he could fulfil two (54) and (55). They are both produced spontaneously and in an appropriate context. For

example, in (55) Matt's choice of phrasal adverb *terlalu* 'too' is quite proper: he was commenting that his wife was too clever (for him), so he looked stupid. His usage of *terlalu* in this case underlines that his comment is very strong. And in (54) Matt told the interviewer that his son was a little diligent.

(54) Ya, dia sedikit rajin.
Yes 3Psg a little diligent
'Yes, he is a little diligent.'

(Mw37s4)

(55) Istri saya terlalu pandai. Er saya bodoh... ((laugh))
wife 1Psg too clever er 1Psg stupid...
'My wife is too clever. Er I am stupid ...'

(Mw37s14)

In (56) Matt misuses the type of phrasal adverb that can precede the adjective lexical item. This error could be considered as either a syntactic error (the phrasal adverb positioned inappropriately) or a lexical error (using *sekali* 'very' rather than *terlalu* 'too'). I opted to treat this as a lexical error, so that it can be considered as an example of the type 2 complex predicative adjective. I consider that Matt shows here that he can apply the rule for the complex predicative adjective type 2, positioning the phrasal adverb before the adjective.

(56) * Mukanya sekali bodoh.
face-his very stupid
(LIT: 'His face is very stupid.')
(FOR: 'His face looks stupid.')

(Mw37s210)

In the subsequent weeks, there are not many examples of the complex predicative adjective type 2 in Matt's production; but he continues to use the structure fluently and with a variety of vocabulary. Thus Matt has grasped the given rule. After acquisition, Matt sustains the structure of complex predicative adjective type 2 (57):

(57) Saya mengira gambar-gambar ini terlalu interesting untuk saya.
1Psg estimate picture-picture DET too interesting for me
'I think the pictures are too interesting for me.'
(Mw51s154)

In summary, although there are few instances of Matt's production of complex predicative adjective type 2, a conclusion can be drawn on Matt's path to acquisition. It appears that he shows onset from the time of his first production (week 8). After acquisition in week 37, he is able to sustain the rule in his production.

Diagram 5.6 shows Matt's stages of acquisition and development of complex predicative adjective type 2:

Diagram 5.6: The Acquisition and Development Stages of Complex Predicative Adjective Type 2: Matt

Stage 1: $S \dashrightarrow NP_{SUBJ} + [Adv+A]_{AP:PRED}$: onset — Weeks 27, 33

↓

Stage 2: $S \dashrightarrow NP_{SUBJ} + [Adv+A]_{AP:PRED}$: acquisition — Week 37

Stage 1: Matt is able to apply the rule, but it is categorised as onset because there is not sufficient evidence to categorise it as acquisition (one occurrence in each of weeks 8, 27 and 33).
Stage 2: Matt has fulfilled the acquisition criteria in this study (week 37).

5.4.3 The Acquisition of Complex Predicative Adjective Type 1: Jane

The data for the complex predicative adjective structure type 1 are not as conclusive as for the simple predicative adjective; however, there is sufficient evidence to determine Jane's timing of acquisition. The discussion of Jane's acquisition path which follows is based on the data in Table 5.10.

Week 8 is the first time Jane produces a phrasal adverb following an adjective lexical item. Contextually, Jane's expression *bagus sekali* 'very good' (59) is an appropriate answer to her conversation partner, who asked whether the dam that she visited was good or not. Had Jane answered *bagus* 'good' without the phrasal adverb *sekali* 'very' it would have been acceptable. I believe this to be the onset of the structure, because Jane's answer was spontaneous and contextually appropriate to her conversation partner's question.

(58) K: Apa dam itu bagus?
Q dam DET good
'Is the dam good?'

(59) Ya, uhm bagus sekali.
yes uhm good very
'Yes, it is very good.'

(Jw8s15)

Table 5.10: The Acquisition of Complex Predicative Adjective Type 1: Jane

	Jane	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8	[1/1]	[1]
9		
11		
12	[1/1]	[1]
13		
15	[1/1]	[1]
16		
17	[1/1]	[1]
21	2/3	0.67
24	2/3	0.67
27		
30		
33		
37		
39		
41		
45	[1/2]	[0.5]
51		
53	2/3	0.67
68	3/3	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In subsequent weeks, Jane produces more evidence for the onset of the complex predicative adjective type 1, producing one example in each of weeks 12 and 17. In both cases, the utterances are spontaneous and contextually appropriate. In week 12, Jane tells her conversation partner that her child is now growing, and that she is very tall (60):

(60) Anak saya tinggi sekali.
child 1Psg tall very
'My child is very tall.'

(Jw12s42)

In week 17, Jane comments that the man in the picture is very big (61):

(61) Dia besar sekali.
3Psg big very
'He is very big.'

(Jw17s171)

Jane acquires the structure $[A + Adv]_{AP:PRED}$ in week 21, with two correct rule applications in three available contexts. In (62) and (63), she has also fulfilled the requirement to use different adjective lexical items:

(62) Toko kecil itu murah sekali.
shop small DET cheap very
'The small shop is very cheap.'

(Jw21s147)

(63) Rumah itu dingin sekali.
house DET cold very
'The house is very cold.'

(Jw21s195)

In examples (62) and (63), Jane is able to extend an adjective lexical item with a phrasal adverb. I do not believe these are 'chunks', since Jane is able to apply the phrasal adverb *sekali* to two different adjectival lexical items in appropriate contexts, and these examples are produced spontaneously. In (62) Jane told her conversation partner that living in England was quite good - food was not so expensive, the goods in the small shop where she used to shop were very cheap, but housing was expensive. She rented an old house, and the house was very cold (63).

In week 21 (64) Jane wanted to say that her husband was very thin but she said that her husband was thin.

(64) * Suami saya very thin uhm kurus? Karena dia tidak makan.
husband 1Psg very thin uhm thin because 3Psg not eat
'My husband is very thin uhm thin? Because he does not eat.'
(Jw21s145)

In this context, she did not add the phrasal adverb *sekali* after the adjective, even though it was clearly her intention. I have, therefore classed this as a non-application of the rule for complex predicative adjective type 1 in an obligatory context. It is probable, though, that the omission was related to Jane's hesitation with producing the lexical item *kurus* 'thin'.

In week 24, there is a distinctive feature of Jane's language production. The context in (65) allows her two options in the target language - either doubling the adjective *murah* 'cheap' to impart a plural meaning to the noun *jaket* 'jacket', or adding an adverb *sekali* 'very' after a single adjective *murah* 'cheap'. Formal Indonesian does not allow both doubling the adjective and adding an adverb. It is interesting to see how Jane develops her own system to convey her communication needs. In this case, she probably wants to convey the meaning of her L1 expression 'very very

cheap', but in the L2, it turns out to mean 'very cheap cheap', which is ungrammatical in the target language.

(65) * Satu jaket anak baik dan murah-murah sekali.
one jacket child good and cheap cheap very
(LIT: 'One child's jacket is very cheap cheap.')
(FOR: 'A child's jacket is very very cheap.')

(Jw24s145)

This is a very interesting development because it is an example of Jane using creative construction in order get her message across. The class input is different from Jane's output, confirming that she is using her own language system in learning the second language. This phenomenon in Jane's IL is similar to Matt's production in week 17 ((48) and (49)).

In the subsequent weeks (weeks 45, 53), Jane still uses doubling of the adjective together with the intensifying adverb, when it appears she intends to give extra emphasis to the meaning of her expression (66).

(66) * Di Inggris tidak ada pajak barang-barang anak uhm
at England not have tax good good child uhm
jadi satu T-shirt anak murah-murah sekali.
so one T-shirt child cheap cheap very
(LIT: 'In England there is no tax for children's goods, so one child's T-shirt is cheap cheap very.')
(FOR: 'In England there is no tax for children's goods, so a child's T-shirt is very very cheap.')

(Jw45s285)

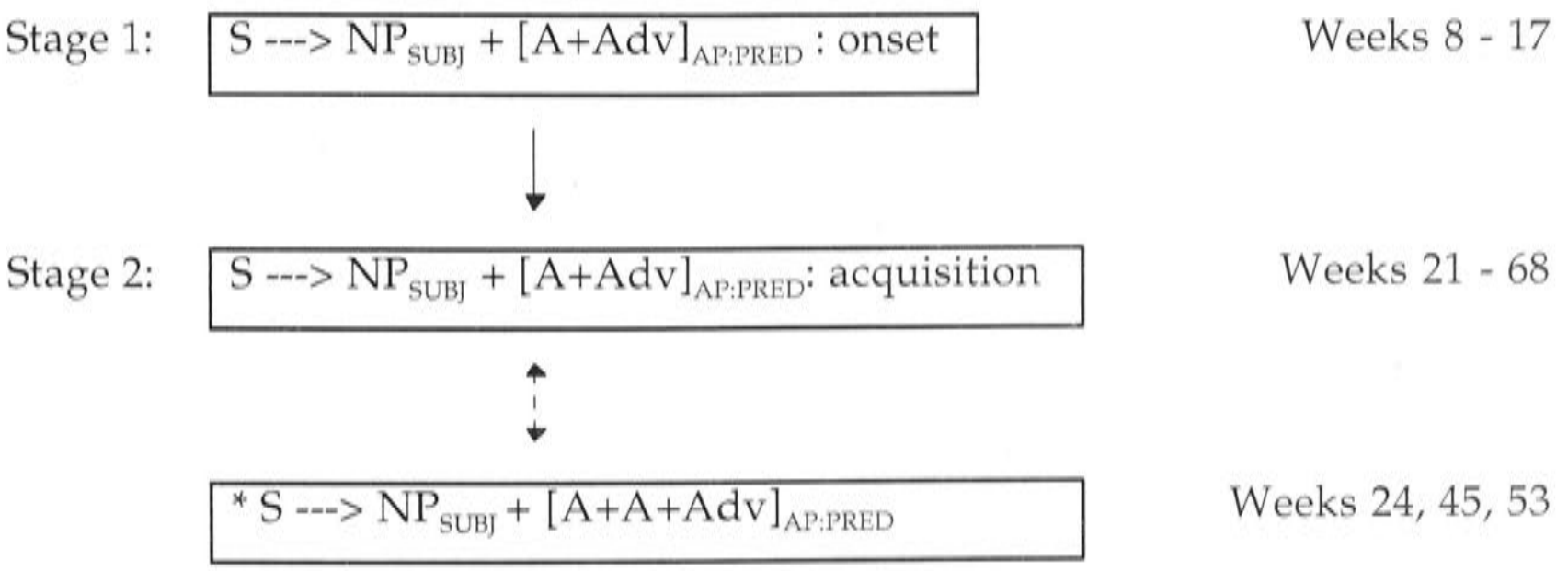
Jane's expression here **murah-murah sekali* 'cheap cheap very' (66) is similar to that in week 24. As with Matt, there is the possibility that this expression is the product of L1 influence. However, I consider it more likely

that it is the result of Jane using her IL rules creatively to convey her meaning. I believe L1 transfer is a unlikely explanation, because in her L1 it is not possible to say 'cheap-cheap very.' In (67) Jane again shows creativity in her IL as in week 24 and week 45, doubling the adjective as well as using an adverb to produce extra emphasis.

(67) * Terjemahan, saya bosan sekali. Pelajaran itu lambat-lambat
translation 1Psg bored very lesson DET slow slow
sekali.
very
'Translation, I am bored with it. The lesson is very very slow.'
(Jw53s51)

In summary, it appears that Jane's acquisition path for complex predicative adjective type 1 begins with the onset in week 8, followed by acquisition in week 21. After acquisition, Jane develops similarly to Matt, continuing to use the doubled adjective plus an adverb to intensify the meaning. Diagram 5.7 shows Jane's path prior to and after her acquisition of complex predicative adjective type 1.

Diagram 5.7: The Acquisition and Development Stages of Complex Predicative Adjective Type 1: Jane



Stage 1: Jane is able to apply the rule, but it is categorised as onset because there is only one occurrence in each interview (i.e. weeks 8, 12, and 17).
Stage 2: Jane has fulfilled the acquisition criteria in this study (week 21).
The broken arrow indicates that Jane misapplies the rule in some instances after acquisition (weeks 24, 45, and 53), but she also applies the rule appropriately at this time. After acquisition, Jane appears to be experimenting with how to express emphasis in the TL.

5.4.4 The Acquisition of Complex Predicative Adjective Type 2: Jane

Jane acquires the complex predicative adjective type 2 in week 39. She does not produce many examples of this structure - her first attempt to use it was in week 15, without success, followed by one successful production in week 30. As a result, it is not easy to give a clear picture of her path to acquisition. However, Jane's production in week 39 is convincing, and she seems to know the TL rule, because she applies the rule to different adjectives spontaneously and in appropriate context. The following section will discuss this in more detail, based on the data in Table 5.11.

Table 5.11: The Acquisition of Complex Predicative Adjective Type 2: Jane

	Jane	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9		
11		
12		
13		
15	[0/1]	[0]
16		
17		
21		
24		
27		
30	[1/1]	[1]
33		
37		
39	2/3	0.67
41		
45	3/3	1
51		
53	[1/1]	[1]
68		

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In week 15, although (68) is unacceptable in the TL, it still shows development in Jane's IL, because she attempted to put an element, 'X', before the adjective *penting* 'important'. In this case she uses a quantifier *banyak* 'many/much' to modify the adjective *penting* 'important'. I speculate that Jane attempts to extend the adjective lexical item *penting* 'important' with the quantifier *banyak* to intensify the meaning of the adjectival phrase. Although this is not acceptable in the TL, it is possibly an indication of development of the IL, because now she is trying to extend the adjective lexical item using an 'X' (= 'phrasal adverb') according to her IL grammar.

(68) * Saya asyik uhm banyak penting.
1Psg occupied many important
(LIT: 'I am occupied uhm many important.')
(FOR: 'I was busy uhm I had many important things to do.')

(Jw15s239)

Jane produced one occurrence in week 30. Her production was quite spontaneous and coherent with the topic of the conversation. In (69) her conversation partner asked her whether she did much work at the weekend, and Jane said that she was a little tired at the weekend. Although it is only one instance, it is possible that this is the onset for Jane's complex predicative adjective type 2.

(69) Ya, saya sedikit capai di weekend.
Yes 1Psg a little tired at weekend
'Yes, I was a little tired at the weekend.'

(Jw30s30)

Week 39 is considered to be the acquisition time for Jane, because she produces more instances compared to the previous weeks and fulfils the acquisition criteria with two correct rule applications in three available

contexts. Also, looking closely at Jane's production, her utterances were spontaneous and contextually appropriate. Jane positions the adverb *sedikit* 'a little bit' before *gemuk* 'fat' (70), and *terlalu* 'too' before *besar* 'big' (71). In these two cases, she is able to use *sedikit* and *terlalu* as phrasal adverbs modifying the adjective lexical items. This shows that Jane's IL grammar has been able to extend the adjective head with a phrasal adverb positioned before the head.

(70) Suami saya tidak makan cake sejak bulan Juni karena dia
husband 1Psg not eat cake since month June because 3Psg
sedikit gemuk di perutnya.
a little fat at stomach
'My husband had not had cake since June, because his stomach is a little bit fat.'

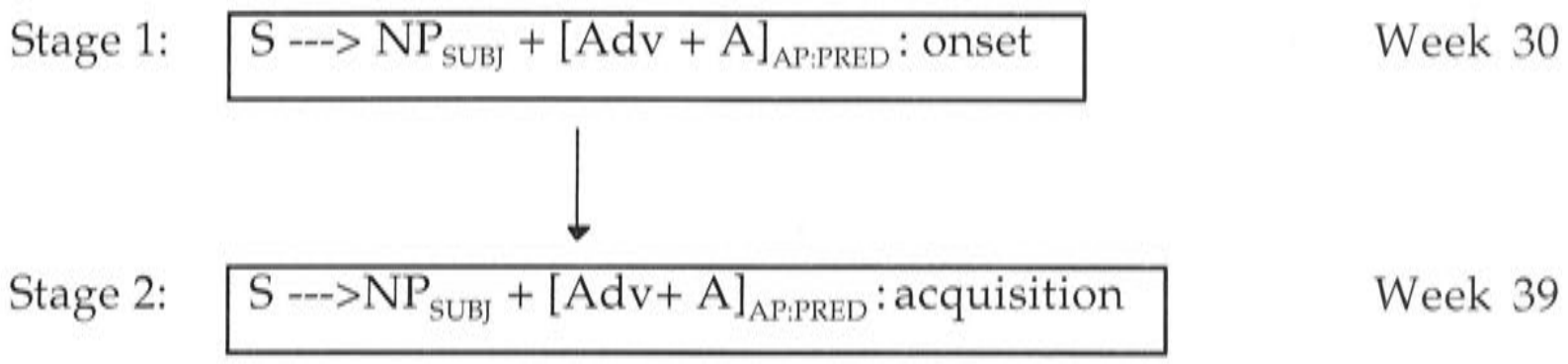
(Jw39s182)

(71) Suami saya tidak gemuk di kaki di jari di uhm hanya perut
husband 1Psg not fat at leg at finger at only stomach
terlalu besar.
too big
(LIT: 'My husband is not fat on his legs or his fingers at uhm only too big at his stomach.')
(FOR: 'My husband is not fat on his legs or his fingers uhm only his stomach is too big.')

(Jw39s184)

In weeks 45 and 53, Jane produces more occurrences. Jane is thus able to sustain the rule application of complex predicative adjective type 2. In summary, although there are few instances, it can be concluded that Jane has acquired the structure. Diagram 5.8 shows Jane's development stages of the complex predicative adjective type 2.

Diagram 5.8: The Acquisition and Development Stages of Complex Predicative Adjective Type 2: Jane



Stage 1: It is categorised as onset, because Jane tried to fill a phrasal adverb position with an 'X', preceding the adjective head (week 15), and in week 30 she was able to add a phrasal adverb preceding the adjective head.
Stage 2: Jane acquired the rule of the predicative adjective type 2. She is able to sustain the structure after acquisition.

5.4.5 The Acquisition of Complex Predicative Adjective Type 1: Kate

Kate's first production of complex predicative adjective type 1 is in week 11, but she does not acquire the structure until week 37. The following table, Table 5.12, shows her production frequency. This is then followed by a discussion.

Table 5.12: The Acquisition of Complex Predicative Adjective Type 1: Kate

	Kate	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9		
11	[1/1]	[1]
12	[1/1]	[1]
13		
15	[1/1]	[1]
16		
17		
21		
24	[1/1]	[1]
27	[1/1]	[1]
30		
33		
37	3/3	1
39		
41	[0/1]	[1]
45	[0/1]	[0]
51	[1/1]	[1]
53	[1/1]	[1]
68	8/8	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Kate's first production of complex predicative adjective type 1 is in week 11; she produces one instance in this week. Kate and her conversation partner were talking about where they grew up, and her partner told Kate that she grew up in Orange, a country town west of Sydney. Kate commented that Orange was very cold (72), showing that she was able to apply the form of the adjective intensifier *sekali* 'very' with an appropriate word. This may indicate the onset of complex predicative adjective type 1 for Kate.

(72) Orange dingin sekali.
Orange cold very
'Orange is very cold.'

(Kw11s44)

In week 12, Kate seems to use the adverb *sekali* 'very' to intensify the meaning of the adjective lexical item *conservative* 'conservative' (73). She shows that in her IL she is able to extend the adjective lexical item 'conservative' with a phrasal adverb *sekali* 'very', and that she has established the position for the adverb.

(73) Orang Stuttgart conservative sekali.
people Stuttgart conservative very
'Stuttgart people are very conservative.

(Kw12s18)

In week 27, Kate shows an interesting development. She is able to contrast the adjective lexical *kurus* 'thin' with *kurus sekali* 'very thin'. Kate is able to contrast the adjective head with and without its phrasal adverb (74). In other words, while the adverb position is not filled in the first occurrence of *kurus* 'thin', on the second occasion, *kurus sekali* 'very thin', it is.

(74) Dia kurus tetapi tidak kurus sekali.
3Psg thin but not thin very
'He is thin but not very thin.'

(Kw27s217)

Contextually, Kate's usage of *kurus* 'thin' versus *kurus sekali* 'very thin' is coherent with the conversation topic. She was telling her conversation partner that her son is allergic to dairy products and a lot of other things. Asked whether he is very thin, she replied that he is thin but not very thin (74). It is clear that this is the onset of Kate's usage of complex predicative adjective type 1. However, at this stage she has not yet fulfilled the criteria for acquisition used in this study.

In week 37 Kate acquires the complex predicative adjective type 1. She uses correct rule application on 3 occasions; they are all produced spontaneously and are coherent with the topic of the conversation. For example, in (75) Kate expresses her feelings of jealousy on seeing a house with a big swimming pool; in (76) she tells her conversation partner that her family is very active, they usually go for a walk after having a picnic; and in (77) she comments that the thief on a picture is very happy.

(75) Saya pergi ke rumah besar dengan pool besar dan saya jealous
1Psg go at house big with pool big and 1Psg jealous
sekali.
very
'I went to a big house with a big swimming pool, and I was very jealous.'

(Kw37s28)

(76) Biasanya kami pergi berjalan-jalan dan ada piknik untuk
usually 1Ppl-EXCL go walk walk and have picnic for
makan siang, kami active sekali.
eat afternoon 1Ppl-EXCL active very
'Usually we go for a walk and have a picnic for lunch, we are very active.'

(Kw37s118)

(77) Orang laki-laki itu pencuri uhm dia senang sekali. ((laugh))
person male DET thief uhm 3Psg happy very
'That man is a thief uhm he is very happy.'

(Kw37s40)

With these three occurrences, Kate shows that her usage of phrasal adverb is not formulaic. She is able to apply the TL rule appropriately, spontaneously and with lexically varied phrases.

In weeks 41 and 45, Kate shows development in her language after acquisition. Kate should have used *sekali* 'very' and *jauh* 'far' postioned after the adjective lexical items, to stress the meanings of how expensive an Australian apple is (78) and how far she and her family walked (79).

(78) * Ya, di Malaysia uhm satu apel Australia uhm
yes at Malaysia uhm one apple Australia uhm
mahal - mahal sekali.
expensive expensive very
(LIT: 'Yes, in Malaysia one Australian apple uhm is expensive expensive very.')
(FOR: 'Yes, in Malaysia one Australian apple uhm is very very expensive.')

(Kw41s250)

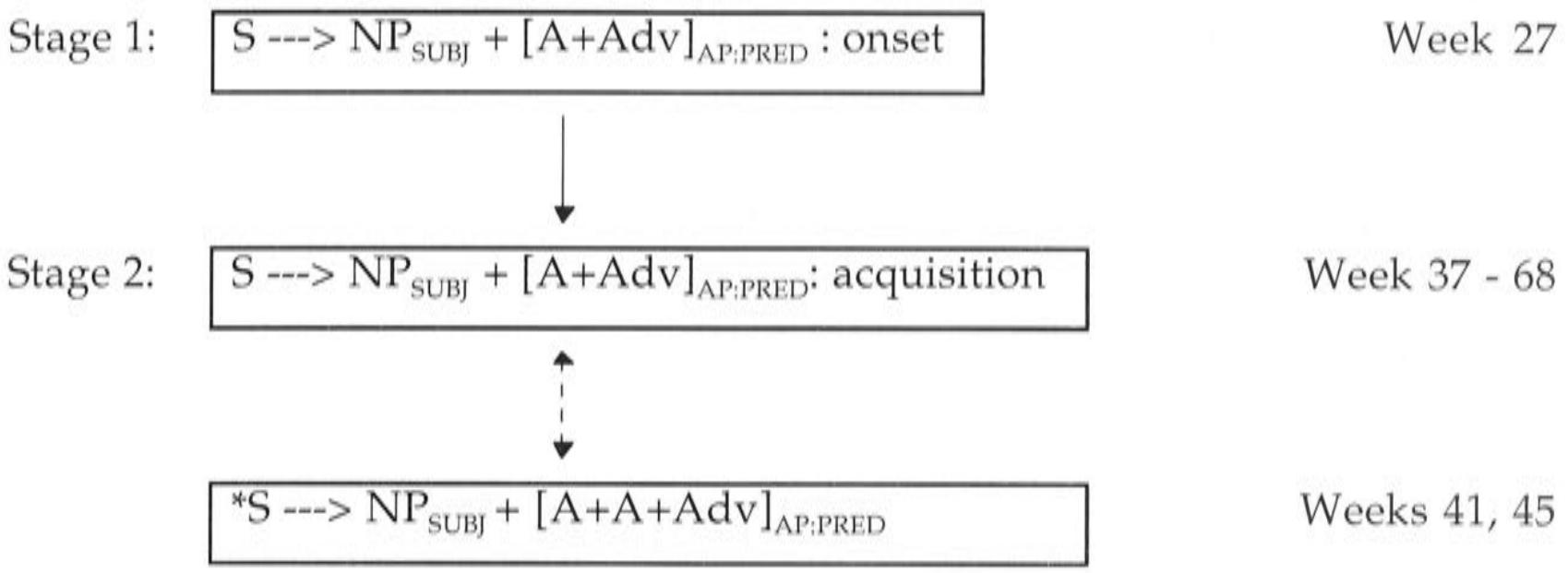
(79) * Di weekend kami berjalan di bush jauh-jauh sekali.
at weekend 1Ppl-EXCL walk at bush far far very
(LIT: 'At the weekend, we walked in the bush far far very.')
(FOR: 'At the weekend, we walked a very very long way in the bush.')
(Kw45s292)

In these contexts, the TL requires a combination of an adjective lexical item follows by a phrasal adverb. Instead, Kate opts to double the adjective lexical items followed by a phrasal adverb to express her communication needs. Similarly, Matt (weeks 12 and 17) and Jane (weeks 24, 45 and 53) also make use of this strategy to stress their message. Although all the learners use this at different times, they all use a similar pattern.

In summary, after acquisition, Kate is able to sustain the structure fairly well. This is supported by her large production in week 68 (8 instances), all of which are produced spontaneously and are contextually appropriate, in accordance with her communication needs.

It appears that on Kate's acquisition path to complex predicative adjective type 1, the onset occurs from week 11 to 27, followed by acquisition in week 37. Kate's post-acquisition development is similar to Matt's and Jane's. Diagram 5.9 shows Kate's path prior to and after the acquisition of complex predicative adjective type 1.

Diagram: 5.9 The Acquisition and Development Stages of Complex Predicative Adjective Type 1: Kate



Stage 1: Kate is able to apply the rule, but it is categorised as onset because there is only one occurrence in each interview (weeks 11, 12, 15, 24 and 27).
Stage 2: Kate has fulfilled the acquisition criteria in this study (week 37).
The broken arrow indicates that Kate misapplies the rule after acquisition (weeks 41 and 45), but she also applies the rule appropriately in this period. This phenomenon appears in the language of all the learners; Kate appears to be experimenting with how to express emphasis in the TL, in the same way as Matt and Jane.

5.4.6 The Acquisition of Complex Predicative Adjective Type 2: Kate

Kate's first attempt to produce complex predicative adjective type 2 is in week 13, and she acquires the structure in week 41. The following discussion of Kate's production is based on the data in Table 5.13 below, showing the frequency of Kate's production.

Table 5.13: The Acquisition of Complex Predicative Adjective Type 2: Kate

	Kate	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4		
8		
9		
11		
12		
13	[0/1]	[0]
15		
16		
17		
21		
24		
27	[1/1]	[1]
30		
33		
37	[1/1]	[1]
39		
41	3/3	1
45		
51		
53		
68	3/3	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Week 13 is Kate's first attempt to produce complex predicative adjective type 2. Although she misuses the type of phrasal adverb that precedes the adjective lexical item (80), her sentence shows that she has established that there is a second possible position for the phrasal adverb within the AP, that is, preceding the adjective. It appears from this example that Kate is trying to express 'too small', but she uses *sekali* 'very' rather than *terlalu* 'too'. I therefore consider this a lexical error, rather than an incorrect structure. But, because my acquisition criteria state that contextually correct usage is one of the factors for acquisition, I have categorised this as an error (as with Matt's production in week 37).

(80) * Dia uhm uhm sekali kecil uhm too small di kelas dia.
3Psg uhm uhm very small uhm too small at class 3Psg
'He is very small uhm too small in his class.'

(Kw13s13)

In weeks 27 and 37, Kate uses one instance in each week. It seems that Kate understands correctly that certain phrasal adverbs can precede the adjectives. For example, in (81) Kate's conversation partner told her that she wanted to go to the coast for a break, and Kate commented that she is too busy this year, she does not go to the coast. In (82) Kate told her conversation partner that in Brisbane the weather is a bit cold in spring. Kate's application of the rule for phrasal adverbs in these two instances is spontaneous and contextually correct. Therefore, this can be regarded as the onset of the structure. It should also be noted that Kate is beginning to establish which adverbs precede and which follow the adjective, since in week 27 she produces both type 1 and type 2 correctly (see (74)).

(81) Saya terlalu sibuk tahun ini, uhm saya tidak pergi ke coast.
1Psg too busy year DET uhm 1Psg not go to coast
'I am too busy this year, uhm I do not go to the coast.'

(Kw27s83)

(82) Ya tetapi hawa sedikit dingin di sana di Brisbane.
yes but weather a little cold at there at Brisbane
'Yes, but the weather is a bit cold there in Brisbane.'

(Kw37s10)

In week 41, Kate acquires the complex predicative structure type 2. She uses the phrasal adverb *terlalu* 'too' before the adjective lexical items in two utterances, and *sedikit* 'a little bit' in one instance. Looking at her usage: Kate shows that she applies the rule spontaneously and in proper contexts. For example, in (83) Kate told her conversation partner that the boy in the picture was too small, he could not climb into the car and also the boy was a little bit fat on the legs (84). From these instances, there is a clear evidence that Kate has acquired the structure.

(83) Dia terlalu kecil di gambar itu uhm dia tidak bisa naik
3Psg too small at picture DET uhm 3Psg not can climb
mobil itu.
car DET
'He is too small in the picture uhm he cannot climb into the car.'

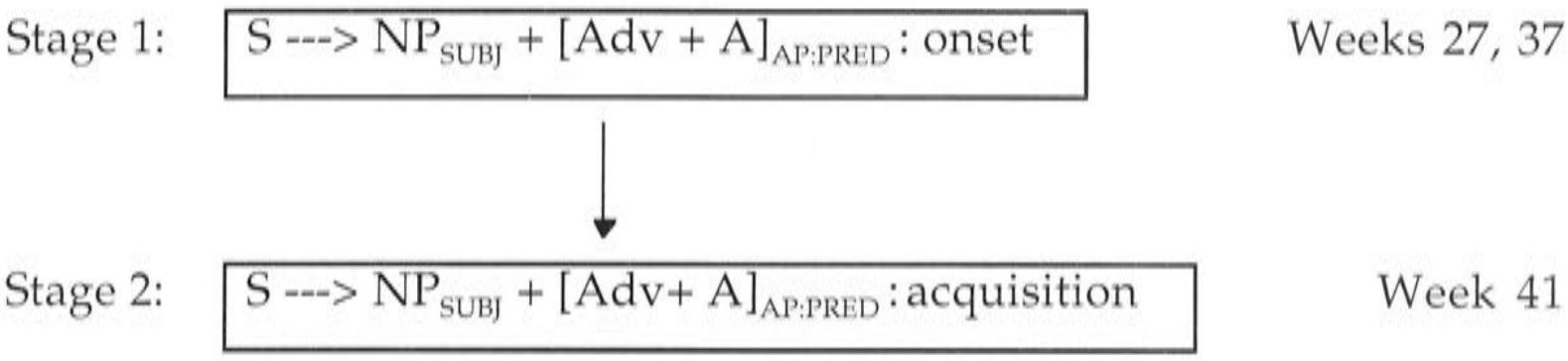
(Kw41s197)

(84) Dia sedikit gemuk di kaki. ((laugh))
3Psg a little fat at leg
'He is a bit fat on the legs.'

(Kw41s199)

It is noticeable that after Kate acquired the structure, she produces three more occurrences in week 68. In summary, Kate is able to sustain the rule of complex predicative adjective type 2. Diagram 5.10 shows Kate's development leading up to the acquisition of complex predicative adjective type 2.

Diagram 5.10: The Acquisition and Development Stages of Complex Predicative Adjective Type 2: Kate



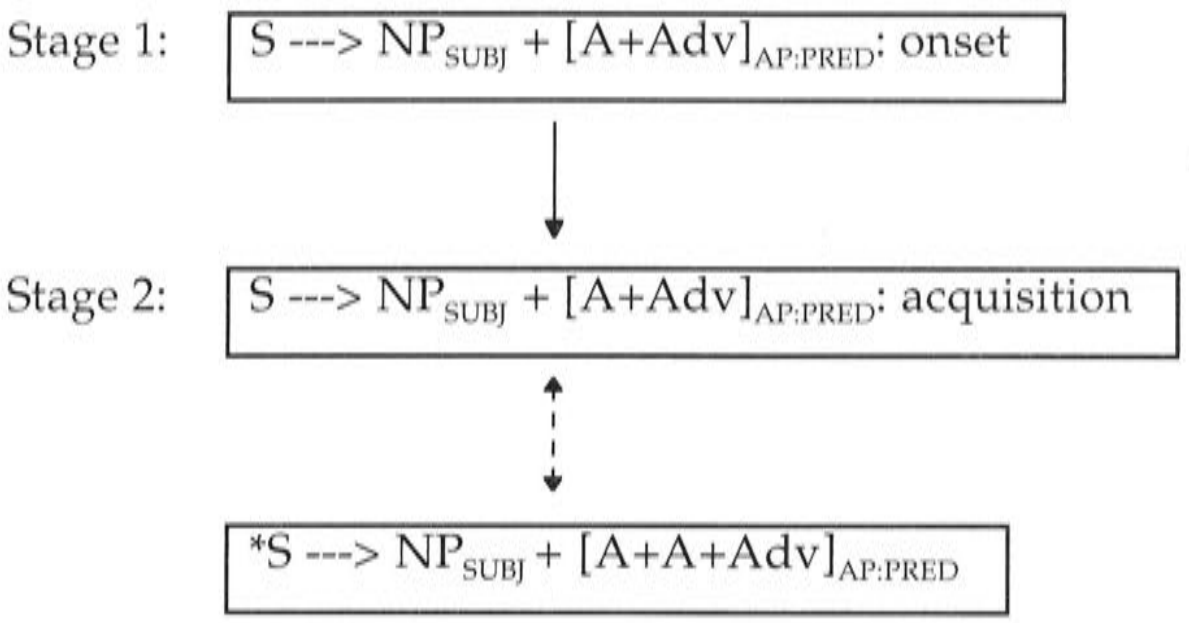
Stage 1: It is categorised as onset, because Kate was able to add a phrasal adverb preceding the adjective head (weeks 13, 27, 37). Although in week 13 Kate's production was marked incorrect, it appears this is a lexical rather than a syntactic error.

Stage 2: Kate is considered to acquire the rule of the complex predicative adjective type 2. She is able to sustain the structure after acquisition.

5.4.7 The Acquisition of Complex Predicative Adjective: Summary

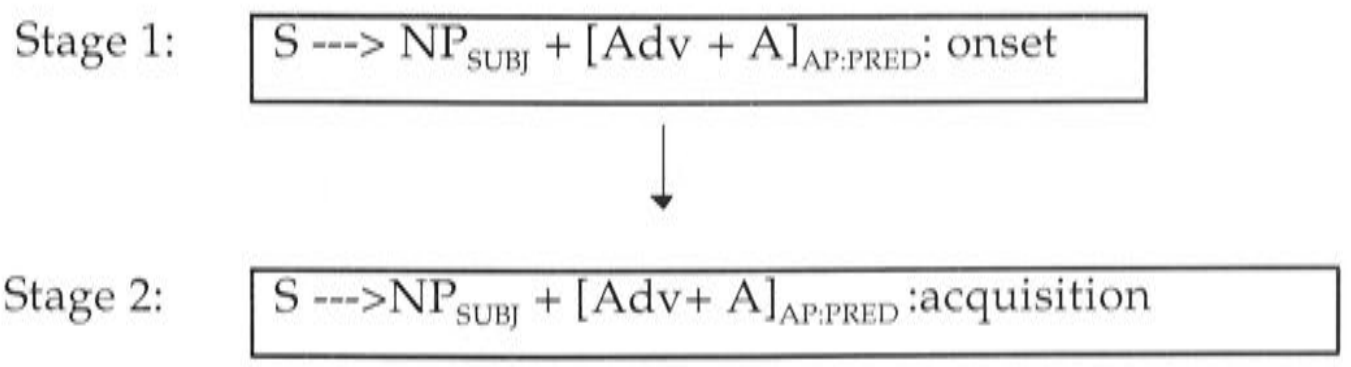
The acquisition and development stages of both types of complex predicative adjective have been presented. All of the learners have an onset stage prior to acquisition, and they acquire the complex predicative adjective type 1 before type 2. The following diagrams, 5.11 and 5.12, show the acquisition and development patterns of Matt, Jane and Kate for both structures.

Diagram 5.11: The Acquisition and Development Pattern of Complex Predicative Adjective Type 1: Matt, Jane and Kate



Matt, Jane and Kate firstly had an onset stage where they all produced the complex predicative adjective type 1 structures (stage 1); this was followed by acquisition where the productions were analysed (stage 2). There is a phenomenon that appears in the language of all the learners after acquisition, and for Matt at the time of acquisition as well. All the learners produced similar structures using a combination of duplicated adjectives plus an adverb. The broken arrow indicates that these errors occur from time to time, at the same time as the learners are using the acquired structure correctly. It appears the learners are attempting to convey additional emphasis on the intensifier.

Diagram 5.12: The Acquisition and Development Pattern of Complex Predicative Adjective Type 2: Matt, Jane and Kate



The acquisition and development of complex predicative adjective type 2 is rather different from type 1. The learners start with an onset and then the acquisition follows where the productions were analysed (stage 2). They do not show development after acquisition (unlike in type 1).

The gap between the acquisition of the two structures is large: from 4 weeks (for Kate) up to 25 weeks (for Matt). Both structures essentially have the same meaning, so the learners could use type 1 instead of type 2. They opted to use type 1, probably because type 1 was introduced earlier in the course than type 2 (see Chapter Six). Semantically, when type 1 was sufficient in serving the purpose of their communication needs, there was no need to use type 2.

It is possible that the learners' acquisition pattern follows a speech processing strategy as proposed by Clahsen (1984): it is easier to add an 'X' (= a phrasal adverb e.g. *sekali* 'very') at the end of the sentence string than to insert an 'X' (= a phrasal adverb e.g. *terlalu* 'too') in the middle of the sentence string, because the second procedure involves permutation (see Chapter One).

5.5 The Acquisition of Simple Attributive Adjective: An Overview

In Indonesian the adjective lexical items usually follow the noun, while in English they usually precede the noun. Thus, in acquiring the predicative adjective in Indonesian, the learners' primary task is to establish the positioning of the noun and adjective. This section focuses on the acquisition of the simple attributive adjective in the form NP ---> N + A - that is, where the NP contains a single adjective lexical item.

Table 5.14 below shows the timing of acquisition of the three learners. From this table, it is apparent that there is some divergence in the timing of

acquisition between the learners. Matt and Jane acquire the attributive adjective at the same time, in week 12; while Kate is 12 weeks later.

Table 5.14: The Accuracy Rates at the Time of Acquisition for Simple Attributive Adjective : Matt, Jane and Kate

	Matt	Jane	Kate
Attributive Adjective	week 12	week 12	week 24
Percentage	67%	100%	100%

It is noticeable that at the point of time when the learners are considered to have acquired the attributive adjective rule of the TL, Jane and Kate achieve 100%, while Matt, who had earlier input, achieves 67%. Although correctness does not relate to the IL grammar, at least the figures illustrate how well the learners perform the rule application. After acquisition all of the learners show development in their use of attributive adjectives, and I will discuss this in more detail in the following sections.

5.5.1 The Acquisition of Simple Attributive Adjective: Matt

The acquisition of simple attributive adjectives for Matt is quite early, although after acquisition he continues to make some errors in some weeks. Table 5.15 shows that Matt uses attributive adjectives for the first time in week 8, but he does not acquire the structure until week 12. The following section will discuss in more detail Matt's path to acquisition and the development of his IL.

Table 5.15: The Acquisition of Simple Attributive Adjective: Matt

	Matt	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4		
8	[2/2]	[1] rp
9		
11	[1/1]	[1]
12	4/6	0.67
13	[1/1]	[1]
15	5/5	1
16	3/3	1
17	10/13	0.77
21	[0/1]	[0]
24	3/3	1
27	4/4	1
30	[1/1]	[1]
33	7/7	1
37	[0/2]	[0]
39		
41	13/13	1
45	4/4	1
51	2/4	0.5
53	4/4	1
68	3/3	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In the first four weeks of interviews, there were no contexts for Matt to produce an attributive adjective. The first instances of this structure are in week 8. In (85) Matt asks the interviewer whether the interviewer spoke Indonesian as a small child, and the interviewer replied yes. In this case the usage of his vocabulary seems appropriate, but whether he has analysed the structure of *anak kecil* 'small child' as an NP ---> N + A (a noun followed by an adjective) is questionable. It is likely that Matt's usage of *anak kecil* is repertoire from the class drill (see 86 a-b).

(85) ... tetapi tatkala anak kecil dengan keluarga berbicara bahasa
... but when child small with family talk language
Indonesia?
Indonesian
'... but when you were a child did you speak Indonesian with your family?'

(Mw8s349)

Instruction: Replace the given preposition with *dari* 'from'

(86) a. Di mana anak kecil itu?
at where child small DET
'Where is the small child?'

(86) b. Dari mana anak kecil itu?
from where child small DET
'Where is the small child from?'

(Johns 1989: 66)

There is one occasion for Matt to produce the attributive adjective in week 11, when he tells the interviewer that his family wanted a new dog (87). This appears to be the onset of the structure, as he produces it spontaneously and in a proper context. However, he has not yet acquired the structure according to the acquisition criteria outlined in this study, as there was only one instance.

(87) Kami mau anjing baru.
1Ppl-EXCL want dog new
'We want a new dog.'

(Mw11s396)

Week 12 is the time when it is clear that Matt acquires the attributive adjective, because he fulfils the criteria for acquisition: spontaneous, contextual and four correct rule applications using three different lexical items. For example in ((88), (89), (90)) Matt's production is fluent and without hesitation in producing the attributive adjective phrases *perempuan kecil* 'small girl' (88), *orang miskin* 'poor people' (89), and *orang putih* 'white people' (90). His production of attributive adjectives is also coherent with the flow of the points he wants to express.

(88) Oh tatkala Beth perempuan kecil di mana er kamu er
oh when Beth girl small at where er 2Psg er
mengelilingi er berkeliling?
go around er go around
'Oh, when Beth was a small girl where did you travel?'

(Mw12s18)

(89) Ah ya, jadi Beth er bisa membantu uhm orang miskin lagi.
ah yes so Beth er can help uhm people poor again
'Oh yes, so Beth can help the poor again.'

(Mw12s113)

(90) Keluarga saya sudah lucky, karena kami treat orang
family 1Psg already lucky because 1Ppl-EXCL treat people
Nigeria baik. Tetapi mereka kira semua orang putih jelek.
Nigeria good but 3Ppl estimate all people white bad
'My family are already lucky, because we treated the Nigerians well.
But they think all of the white people are bad.'

(Mw12s131)

It is interesting to look at Matt's one inappropriate performance of the attributive adjective in week 12 (the time of acquisition). In (91) he reverses the order of the attributive adjective: *NP ---> A + N.

(91) * tetapi putih extremist membuat buruk things.
but white extremist make bad things
'... but white extremist made bad things.'

(Mw12s135)

After acquisition Matt makes some similar errors in weeks 17, 37, 51, where he applies the L1 word order, that is *NP ---> A + N. However, these errors are infrequent compared with Matt's overall production. Possibly, the errors reflect the fact that the IL is dynamic not static, and may change form from time to time in an unpredictable way. For example in (92) and (93).

(92) * Oh, harga gelang itu kusus harga.
oh price bracelet DET special price
'Oh, the price of the bracelet is special price.'

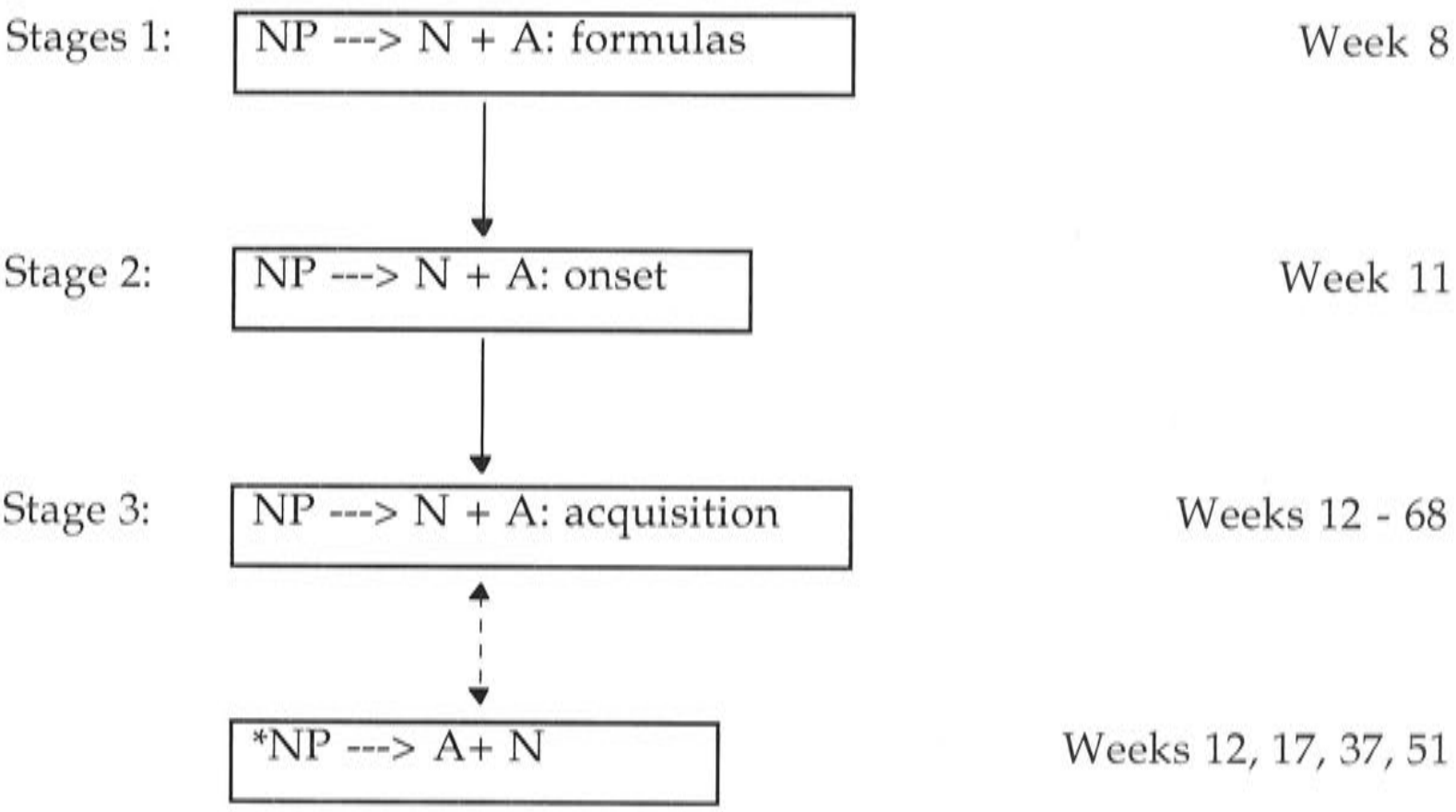
(Mw17s133)

(93) * Saya mau mulai baru bisnis.
1Psg want start new business
'I wanted to start a new business.'

(Mw51s89)

In summary, after acquisition, Matt is able to sustain the structure rule of the attributive adjective on most occasions. The stages of acquisition and development of the simple attributive adjective rule of NP ---> N + A for Matt are represented in Diagram 5.13:

Diagram 5.13: The Acquisition and Development Stages of Simple Attributive Adjective: Matt



Stage 1: At first sight, Matt, syntactically, produced the correct structure of the simple attributive adjective, but his productions are categorised as formulas, because they are possibly copied from the class drill exercise (week 8).

Stage 2: At this stage Matt's production is categorised as onset: he is able to apply the rule, but there is not yet enough evidence (one instance) to be categorised as acquisition (week 11).

Stage 3: Matt has acquired the rule of simple attributive adjective (week 12): his productions are contextually proper and lexically varied. After acquisition Matt is able to sustain the structure rule in most instances.

At the time of acquisition and after, Matt applies *NP ---> A + N in weeks 12, 17, 37, and 51. This phenomenon, where he uses L1 word order, does not appear in Matt's language before the acquisition of the simple attributive adjective.

5.5.2 The Acquisition of Simple Attributive Adjective: Jane

The acquisition of attributive adjectives for Jane is also quite early, and like Matt, she made some errors after acquisition. Table 5.16 shows that Jane produced the structure for the first time in week 9, and she acquired it in week 12 (the same time as Matt). After acquisition she made some errors in weeks 13, 17, and 24. The following section will discuss Jane's IL acquisition and development in more detail.

Jane's first trial of using the attributive adjective was in week 9 (95). At this stage it appears that she has not worked out the system of the TL grammar yet, because the attributive adjective is constructed by way of substitution of the noun from the interviewer's question in the preceding sentence (94). Jane produces the attributive adjective properly, but it is clear that the structure and vocabulary were provided: so Jane is still at the stage of repertoire, or repetition from the model grammar, and therefore her production is categorised as a formula. In this example, the topic of the conversation was housing in Germany, and the interviewer commented that it was expensive and the area was small (94). Then, unexpectedly, Jane said that 'London was a small area.' It appears that she is using the model provided and substituting 'London' for 'Germany' (95).

(94) Iw: Di Jerman rumah mahal dan daerah kecil.
at Germany house expensive and area small
'In Germany housing is expensive and the area is small.'

(95) London daerah kecil.
London area small
'London is a small area.'

(Jw9s293)

Week 12 is the time where Jane has fulfilled the acquisition criteria, producing four correct examples in four available contexts;[11] for example, in (96) and (97).

(96) Di Greece hotel murah itu kotor.
at Greece hotel cheap DET dirty
'In Greece the cheap hotel is dirty.'

(Jw12s179)

(97) Crete daerah indah.
Crete area beautiful
'Crete is a beautiful area.'

(Jw12s216)

In (96), Jane is able to apply the lexical item *murah* 'cheap' as an attribute to the noun *hotel* 'hotel', and in (97) *indah* 'beautiful' as an attribute to the noun *daerah* 'area'. Her utterances seem to be spontaneous, are lexically varied, and contextually proper. She is able to apply the attributive adjectives to fulfil her communication needs in line with the topic of the conversation: in (96) Jane tells her conversation partner that when she went for a holiday in Greece, and the cheap hotel where she stayed was dirty; and in (97) she told her conversation partner that Crete was beautiful.

---

[11] There may have been an onset period between weeks 10 and 11; but, as Jane did not produce any simple attributive adjective structure, it is impossible to comment.

Table 5.16: The Acquisition of Simple Attributive Adjective: Jane

	Jane	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9	[1/1]	[1] rp
11		
12	4/4	1
13	[2/5]	0.4
15		
16	3/3	1
17	4/5	0.8
21	[2/2]	[1]
24	3/5	0.6
27	3/3	1
30	[1/1]	[1]
33		
37	[1/1]	[1]
39		
41	[2/2]	[1]
45	4/4	1
51	[1/1]	[1]
53		
68	[2/2]	[1]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

rp = repertoire

After Jane acquires the grammatical rule of the attributive adjective, she makes some errors in weeks 13, 17, and 24. All of Jane's errors are the same type, reversing the TL word order. For example in (98) and (99) she uses *A + N (**baik baju*, and **buruk barang*) instead of N + A (*baju baik* 'good clothes', and *barang buruk* 'bad things').

(98) * Saya membuat baik baju untuknya.
1Psg make good clothes for -3Psg
'I made good clothes for her.'

(Jw17s62)

(99) * Mereka berkata buruk barang tentang dia.
3Ppl say bad thing about 3Psg
'They said bad things about him.'

(Jw24s171)

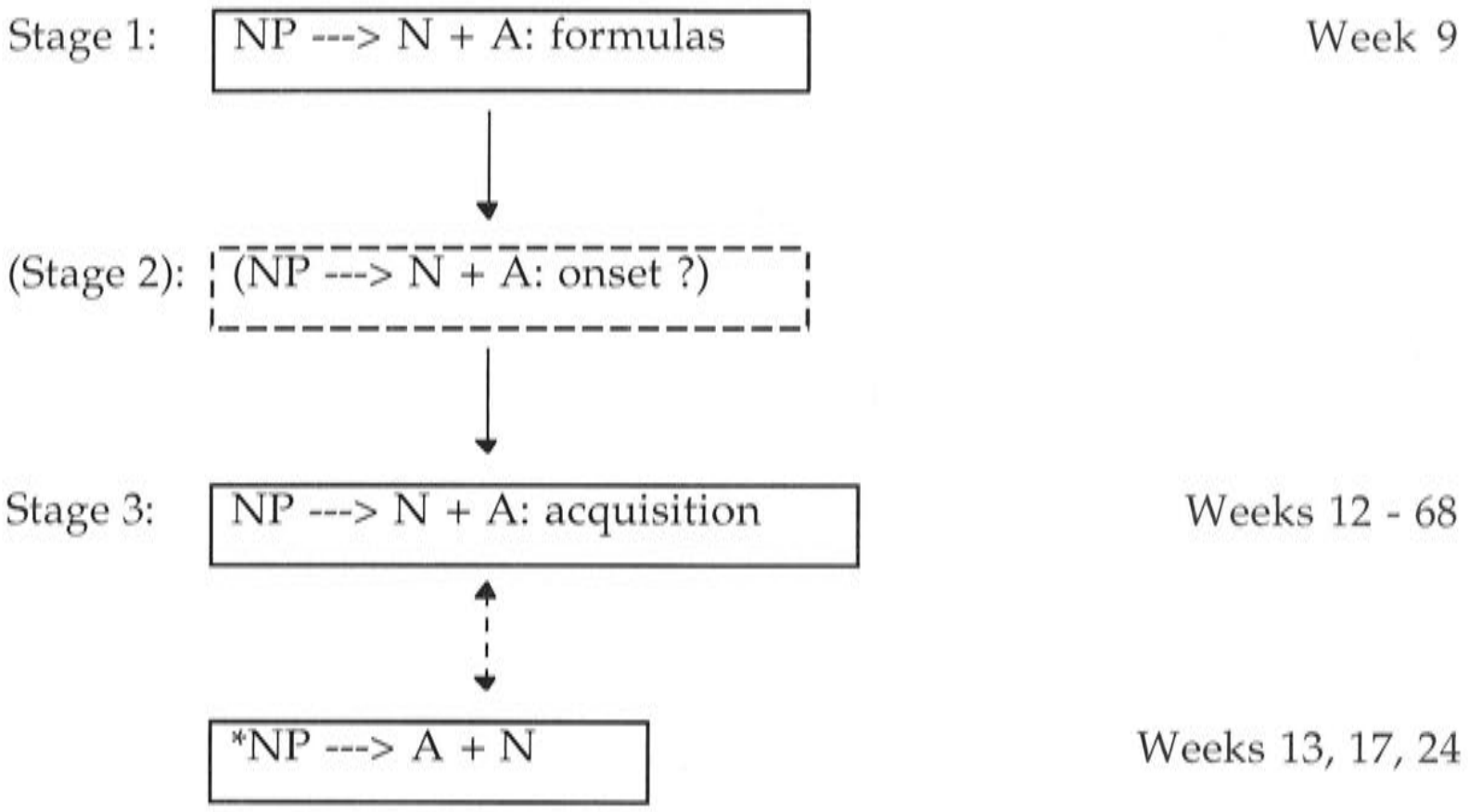
These errors are viewed as development in Jane's language. In week 13 Jane made one error, but she corrected herself: in (100) at first she applied the L1 word order, **besar sepatu* then she corrected herself to *sepatu besar* 'big shoes'. Thus Jane shows that she is able to retain the correct rule.

(100) Dia memakai besar sepatu er sepatu besar.
3Psg wear big shoe er shoe big
'He wore big shoes er big shoes.'

(Jw13s64)

In summary, after acquisition, Jane is able to sustain the structure rule of attributive adjective on most occasions. The stages of acquisition and development of the simple attributive adjective rule of NP ---> N + A for Jane can be represented in Diagram 5.14:

Diagram 5.14: The Acquisition and Development Stages of Simple Attributive Adjective: Jane



Stage 1: At this stage, Jane's production is categorised as formulas, because she copied her utterance from the interviewer (week 9: one instance).

Stage 2: Had there been some data documented, Jane may have gone to stage 2, which was categorised as onset (week 10 - 11).

Stage 3: Jane has acquired the rule of simple attributive adjective (week 12): her productions are contextually proper and lexically varied.

After acquisition Jane applies *NP ---> A + N in weeks 13, 17, and 24. This phenomenon, where she uses L1 word order, is categorised as a post-acquisition phase in Jane's language production.

5.5.3 The Acquisition of Simple Attributive Adjective: Kate

The acquisition of attributive adjective for Kate is rather later than for Matt or Jane. Like Matt and Jane, Kate also makes a few errors after acquisition. Table 5.17 shows that Kate's first trial of using attributive adjectives is in week 9, but, because her production is not yet sufficient, the structure is not considered acquired until week 24. After acquisition she makes a few errors in week 27 and week 53. The following section will discuss Kate's acquisition and development in more detail.

Kate's first production of attributive adjective is in week 9 when she produces *orang tua* 'parents' (101). The attributive adjective used in (101) and also (102) can be interpreted in two ways in Kate's IL grammar: either as NP --> N + A meaning 'old people', or as a compound noun meaning 'parents'. From the context that Kate produces, the meaning refers to the compound noun 'parents', like the expression used in the textbook. In other words, Kate has learned the phrase *orang tua* 'parents' as a single element rather than two, because the input leads her to treat this as one unit, rather than two. At this stage, it is unclear whether she has analysed *orang tua* as an NP that consists of noun + adjective (*orang* 'person' + *tua* 'old'); it is more likely that she treated it as one 'chunk,' therefore her production is categorised as formulas.

(101) Dia pergi di rumah orang tua.
3Psg go at house person old
'He went to his parents' home.'

(Kw9s46)

(102) Ya, saya suka orang tua saya. ((laugh))
yes 1Psg like person old 1Psg
'Yes, I like my parents.'

(Kw11s61)

Table 5.17: The Acquisition of Simple Attributive Adjective: Kate

	Kate	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9	[1/1]	[1] rp
11	[1/1]	[1] rp
12	[2/2]	[1]
13		
15	[1/1]	[1]
16	[1/1]	[1]
17	[2/2]	[1]
21	[1/1]	[1]
24	6/6	1
27	[1/2]	[0.5]
30		
33		
37		
39	5/5	1
41	8/8	1
45	[2/2]	[1]
51	[1/1]	[1]
53	2/3	0.67
68	[2/2]	[1]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

Kate's production from week 12 to week 21 shows the onset of the rule application for attributive adjectives, for example (103), (104), and (105). In week 12, she produced two instances of the structure: (103) and (104), and in week 21 she produced one instance.

(103) Dia ada sepatu baru.
3Psg have shoe new
'He had new shoes.'

(Kw12s54)

(104) Mereka minum air kotor.
3Ppl drink water dirty
'They drank dirty water.'

(Kw12s124)

(105) Ketika anak laki-laki saya lahir, kami ada rumah kecil.
when child male-male 1Psg born 1Ppl-EXCL have house small
'When our son was born, we had a small house.'

(Kw21s196)

Kate's usage of attributive adjectives seems to be in appropriate contexts during weeks 12 - 21: for example, in (103) she tells her conversation partner that her son had a new pair of shoes for camping, and also that her husband and son were sick (because) they drank dirty water (104). In (105) she tells her conversation partner that when her son was born they had a small house. It appears that Kate's usage of attributive adjective in these instances is coherent with the topic of her communication needs, therefore at this stage it is categorised as onset in accordance with the criteria of this study.

Week 24 is the time of acquisition for Kate. In this week, she produces six correct rule applications, and her productions are spontaneous and lexically varied. For example, in (106), (107), and (108) Kate's applications of

attributive adjectives are contextually proper and serve her communication needs. Kate is telling her conversation partner about her experience when she lived in Germany, where they had two kinds of taxes - a general goods and services tax, and a luxury goods tax (106) - but to compensate for these taxes they had high wages (107); however, they also had high unemployment, and this was not good for poor people (108). From these utterances, Kate's usage of the attributive adjective sounds natural and coherent with the topic of the conversation; in addition her production does not resemble any of the formal input, so I conclude that this week marks the acquisition stage of attributive adjectives for Kate.

(106) Di Jerman mereka ada kedua-dua pajak pelayanan dan pajak
at Germany they have both tax service and tax
barang-barang mewah.
good-good luxury
'In Germany they have both general goods and services tax and luxury goods tax.'

(Kw24s293)

(107) Tetapi mereka ada upah besar di Jerman.
but they have wages big in Germany
'But they get high wages in Germany.'

(Kw24s301)

(108) ... tetapi banyak pengangguran uhm untuk orang miskin itu
... but many unemployment uhm for person poor DET
tidak bagus.
not good
'... but there is a lot of unemployment uhm for poor people it is not good.'

(Kw24s315)

It is interesting to note that after acquisition Kate (like Matt and Jane) also shows some errors in weeks 27 and 53. In these two instances Kate reverses the word order into: *NP ---> A + N as in (109) and (110). These are categorised as post-acquisition phase in Kate's language production.

(109) * Family saya suka besar taman di tengah kota.
family 1Psg like big park at centre town
'My family likes big parks in town centres.'

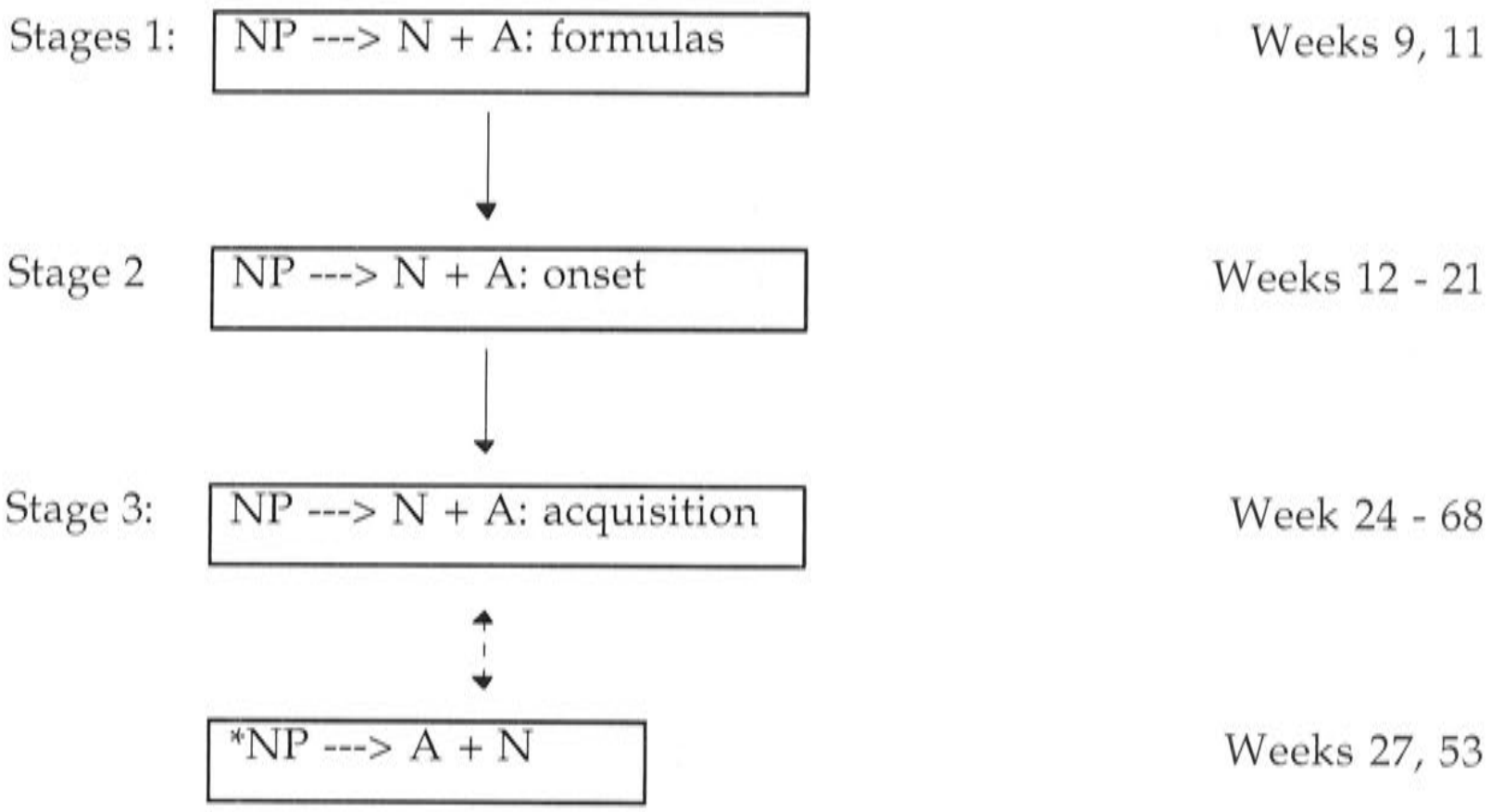
(Kw27s142)

(110) * Saya membeli rumah itu dengan tua harga.
1Psg buy house DET with old price
'I bought the house with old price.'

(Kw53s125)

In summary, after acquisition, Kate is able to sustain the structure rule of the attributive adjective on most occasions. The stages of acquisition and development of the simple attributive adjective rule of NP ---> N + A for Kate can represented in Diagram 5.15:

Diagram 5.15: The Acquisition and Development Stages of Simple Attributive Adjective: Kate



Stage 1: Kate, at this stage, is using formulas; she treats the structure as a single chunk (weeks 9, 11: one instance each).

Stage 2: This stage is categorised as Kate's onset (weeks 12 - 21). Kate's onset is quite long (10 weeks). Compared with the other learners, she is the only one to exhibit a clear onset period for the simple attributive adjective.

Stage 3: Kate has acquired the rule of simple attributive adjective (week 24): her productions are contextually proper and lexically varied.

After acquisition Kate applies *NP ---> A + N in weeks 27 and 53. This phenomenon is categorised as a post-acquisition phase in Kate's language production.

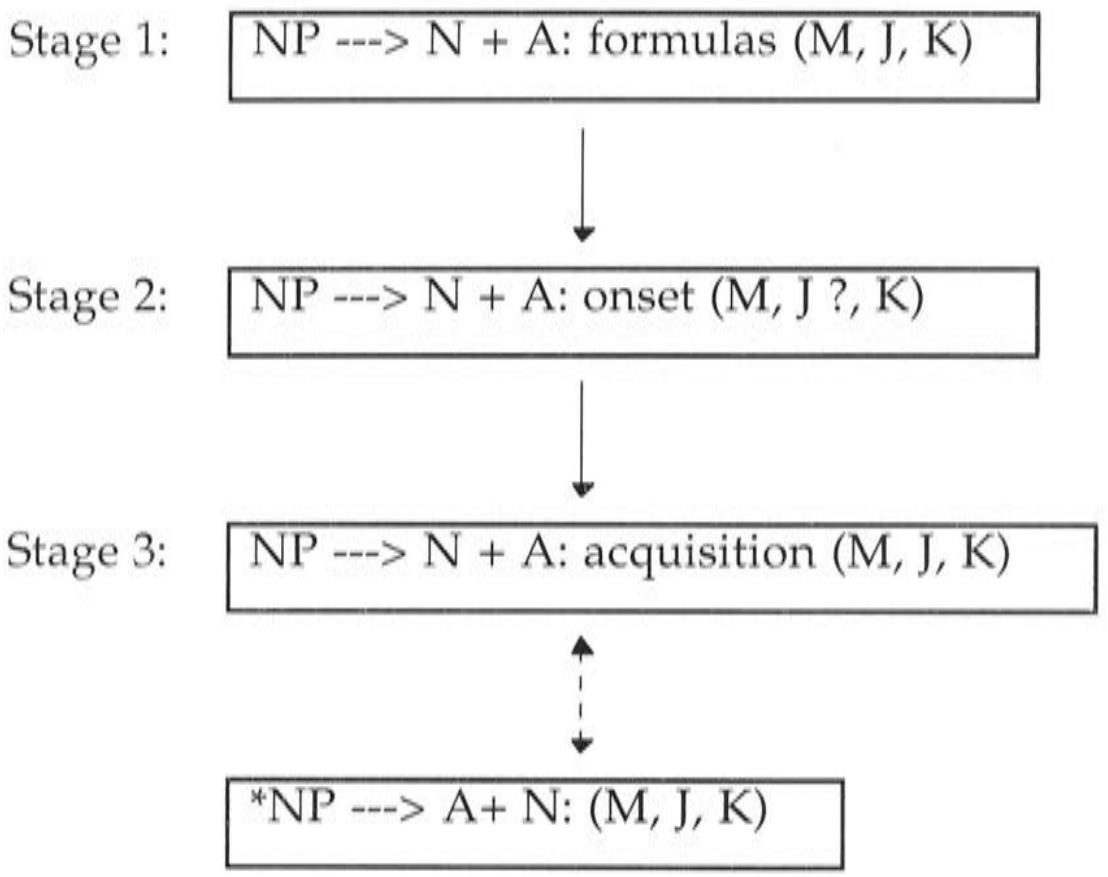
5.5.4 The Acquisition of Simple Attributive Adjective: Summary

The three learners' grammar on their paths to acquisition and their development for attributive adjectives have been presented. It appears that learners have to go through a formulaic stage prior to acquisition. Simple attributive adjectives are acquired considerably later than simple predicative adjectives (see 5.3): Jane and Matt acquired the structure in week 12, followed by Kate in week 24.

Interestingly, once the simple attributive adjective structure was acquired, all of the learners made a few errors by reversing the word order *NP ---> A + N, in other words, applying the L1 word order. The error rate for all the the learners is very low; this suggests that L1 influence on the acquisition of attributive adjectives is not significant, and that all the learners are able to use the L2 word order from the outset without much difficulty. It is noteworthy that none of the learners produce this type of error before acquisition. However, this can be viewed as evidence to support their acquisition: the errors are clearly not repertoire, showing that the learners, at this stage, are producing phrases using their own language resources.

The following diagram (Diagram 5.16) shows the acquisition pattern and development of the simple attributive adjective for Matt, Jane and Kate.

Diagram 5.16: The Acquisition Pattern of the Simple Attributive Adjective: Matt, Jane and Kate



Matt, Jane and Kate first had a formulaic stage (stage 1); followed by onset,[12] where the productions were contextual but there was insufficient evidence (stage 2); then acquisition (stage 3), where the productions were contextual and lexically varied. All the learners exhibit a phenomenon in their language, where they sometimes use the L1 word order (A+N), reversing the word order of the TL. This phenomenon does not appear until the simple predicative adjective is acquired, and it occurs only in a minority of the learners' utterances, indicating that, although there is some L1 influence, it is quite small.

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[12] Although Jane does not produce the structure, I assume she might have had an onset period prior to acquisition.

The next section will investigate the acquisition and development of the complex attributive adjective for the three learners.

5.6 The Acquisition of Complex Attributive Adjective: An Overview

Recall that the term complex attributive adjective refers to the case where a relative clause unit is embedded under the NP, using the form NP --> N + [REL + A]$_{\text{REL CL}}$ + (DET), as shown in sentence (9) (reproduced from the beginning of the chapter for convenience):

(9) anak yang cantik (itu)
child REL pretty (DET)
'(the) pretty child'

In this section, I will describe the acquisition and development of the complex attributive adjective, using the relative pronoun marker (or relativiser) *yang* 'who, which, that' in appropriate contexts to modify the preceding noun (see Chapter Three). For this structure, the acquisition criteria need to be modified, as there is only one relativiser in the TL. For this reason, the requirement to use varied lexical items is not used for acquisition of the relative pronoun *yang*, but it still applies to the adjective lexical items.

Table 5.18 below shows the acquisition timing of complex attributive adjective as well as the accuracy rates at the time of acquisition.

Table 5.18: The Accuracy Rates at the Time of Acquisition for Complex Attributive Adjective: Matt, Jane and Kate

Structure	Matt	Jane	Kate
Complex Attributive Adjective	week 68	week 45	week 68
Percentage	100%	100%	100%

All three learners acquire the complex attributive adjective later than the simple attributive adjective (see Table 5.11). The difference is shown in terms of the timing, not of the sequence.

Jane acquires the complex attributive adjective in week 45. She is the earliest to acquire this structure: both Matt and Kate acquire it in week 68.[13] Looking at the accuracy rates: all of the learners achieve 100 per cent at the point of acquisition. After acquisition, Jane's use of the complex attributive adjective is stable. Because Matt and Kate acquire the structure in the last week of data collection, it is not possible to discuss their use of the structure following acquisition.

The very late acquisition of the complex attributive adjective for all three learners is expected, since the structure itself is also complex. The phrase structure tree shows that the *yang*-clause is nested under the NP (see Chapter Three). The following sections will discuss the acquisition paths and the language development of the learners.

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[13] Regrettably, Matt's and Kate's time of acquisition for the complex attributive adjective was not accurately documented. There was a gap of 15 weeks from week 54 to week 68 when interview sessions were not conducted. This is a significant gap, and acquisition may have occurred at any time during this period. Originally, the interview in week 68 was intended as a follow-up, to determine whether the learners retained the acquired structures; but it transpired that acquisition occurred at the last interview.

5.6.1 The Acquisition of Complex Attributive Adjective: Matt

Matt's first attempt to use the complex attributive adjective structure is in week 13, although acquisition does not occur until 55 weeks later. The following discussion of Matt's production is based on the data in Table 5.19 below, which shows Matt's frequency of production.

The first attempt to use the structure presumably demonstrates at least that Matt is aware of the complex attributive adjective structure. It is possible that Matt starts to realise that there are two ways to express attributive adjectives: one is the simple attributive adjective and the other is the complex structure that involves a relative pronoun *yang* 'who, which, that.' In previous weeks he used only the simple form (he acquires this in week 12), now he tries the complex one. Although his application of complex attributive adjective in this sense is incorrect, it is still interesting to see his language grammar at this point of time.

Table 5.19: The Acquisition of Complex Attributive Adjective: Matt

	Matt	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9		
11		
12		
13	[0/2]	[0]
15		
16		
17		
21	[0/1]	[0]
24		
27		
30		
33		
37		
39		
41		
45	[1/1]	[1]
51		
53	[1/1]	[1]
68	8/8	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In week 13, Matt attempted to insert the relativiser *yang* between *pelayan* 'assistant' and *wanita* 'woman' (111); and between *sopir* 'driver' and *laki-laki* 'man' (112). Although on both occasions they are incorrect rule applications of *yang*, Matt's experiment shows that he is possibly aware that *yang* is used to introduce the modification of the preceding nouns *pelayan* 'assistant' and *sopir* 'driver' respectively. However, in both examples, Matt uses a noun after *yang*, rather than an adjective.

(111) * Ya, itu pelayan yang wanita.
yes DET assistant REL woman
(LIT: 'Yes, the assistant who is a woman.')
(FOR: 'Yes, the assistant is a woman.')

(Mw13s100)

(112) * Ini sopir er yang laki-laki.
DET driver er REL male-male
(LIT: 'The driver er who is a man.')
(FOR: 'The driver er is a man.')

(Mw13s150)

In week 21, Matt still applies *yang* incorrectly, placing it before a noun (114):

(113) Iw: Apa-kah Matt sibuk di kantor?
Q-marker Matt busy at office
'Are you busy in the office?'

(114) * Ya, saya yang pegawai negeri. ((laugh))
yes 1Psg REL employee state
(LIT: 'Yes, I who am a public servant.')
(FOR: 'Yes, I am a public servant.')

(Mw21s48)

When the interviewer asks him whether he is busy at work (113), he answers *yes he who is a public servant (114). In this context, again, he tries to insert *yang* between NP_{SUBJ} *saya* 'I' and NP_{PRED} *pegawai negeri* 'public servant' which is unacceptable in the TL. Presumably, this is meant to stress his message that a public servant works very hard.

In weeks 45 and 53 Matt produces *yang* as a relativiser on two occasions (115) and (117). If we compare these structures (weeks 45 and 53) to his use of *yang* in the previous weeks (weeks 13 and 21), it appears that now he demonstrates his ability to use it correctly. For example, in (117) he asks whether it is a particular man (in the picture) who is angry, when the interviewer comments that one of the gentlemen is angry (116).

(115) Er istri saya suka mahasiswa-mahasiswa yang pandai. ((cough))
er wife 1Psg like student student REL clever
(LIT: 'Er my wife likes university students who are clever.')
(FOR: 'Er my wife likes clever students.')

(Mw45s54)

(116) Iw: Oh, dia marah. ((laugh))
oh 3Psg angry
'Oh, he is angry.'

(117) Apa Bapak[14] itu yang marah?
Q sir DET REL angry
(LIT: 'Is that the man who is angry?')
(FOR: 'Is that man angry?')

(Mw53s35)

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[14] When terms like *bapak* 'father, sir' or *ibu* 'mother, madam' are used to substitute for the second person pronoun, they are usually capitalised.

In week 68 Matt shows that he has acquired the complex attributive adjective, because he produces eight examples out of eight possible contexts, using different adjective lexical items in each case. His production is quite spontaneous and his rule applications using the *yang*-clause are contextually proper. All of Matt's sentences in this week are coherent with his communication needs. In the example sentences, ((118), (119), (120)), Matt succeeds in getting his message across to his conversation partner nicely.

In (118) Matt told his conversation partner he used meetings to make friends and build up business relations, so he wanted to build strong relations with the Embassy staff. In this case, his usage of the *yang*-clause in *relasi yang kuat* 'strong relation' demonstrates the TL proper rule application. As we can see, Matt did not show hesitation in using this complex attributive adjective structure.

(118) Saya memakai pertemuan er untuk membuat teman-teman
1Psg make meeting er for make friend-friend
dan mulai relasi business. Saya mau er membuat relasi yang
and start relation business 1Psg want er make relation REL
kuat dengan Embassy.
strong with embassy
(LIT: 'I use meetings to make friends and start business relation. I want er make relation which is strong with the Embassy.')
(FOR: 'I use meetings to make friends and also build up business relations. I want to have strong relations with the Embassy.')

(Mw68s166)

(119) Uhm mungkin suami yang uhm marah tembak saya.
uhm maybe husband REL uhm angry shoot 1Psg
(LIT: Uhm maybe a husband that is angry shoot me.')
(FOR: Uhm maybe an angry husband will shoot me.')

(Mw68s249)

(120) Ya, orang Indonesia suka cerita yang menarik.
yes people Indonesia like story REL interesting
(LIT: 'Yes, Indonesian people like stories which are interesting.')
(FOR: 'Yes, Indonesian people like interesting stories.')
(Mw68s359)

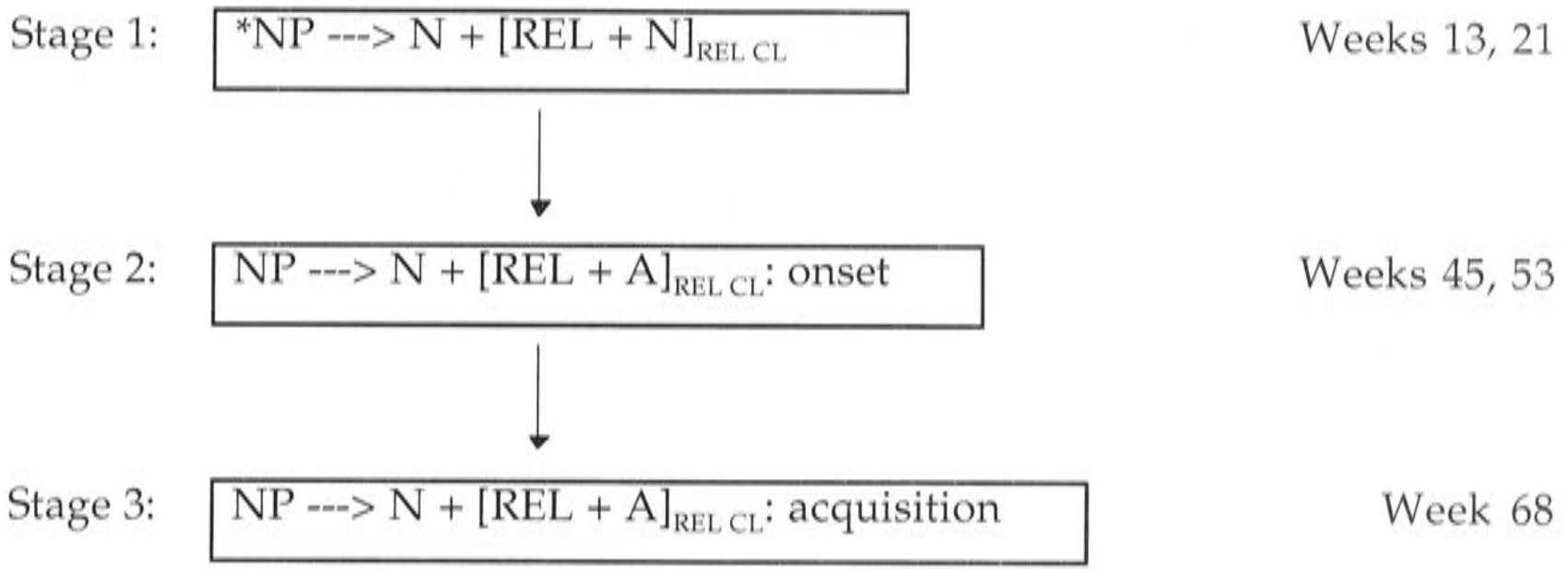
In (119) Matt's comment to his conversation partner - that maybe the angry husband would shoot him - is very appropriate to the conversational context. His usage of *yang* is expected, if it were absent the meaning would be awkward and his sentence would not resemble that of a native speaker of Indonesian. Similarly, in (120), the presence of *yang* makes Matt's utterance resemble the TL norm in such a situation.

From the examples above, it is clear that Matt does not use the structure of NP ---> N + $[REL+A]_{REL\ CL}$ out of context; instead his utterances resemble those of a native speaker of the TL in such contexts. Matt has also demonstrated that he is able to use a variety of lexical items in his production of complex attributive adjective (119) and (120). This demonstrates that Matt is able to apply the rule in the appropriate contexts.

To sum up, week 68 is the time when Matt has acquired the complex attributive adjective. This is the last session of the data collection, so there is no post-acquisition data. Had the data continued to be collected after this time, it is possible that Matt would be able to continue to use complex attributive adjectives.

Matt passes through several stages prior to acquisition of the complex attributive adjective. Diagram 5.17 shows these stages.

Diagram 5.17: The Acquisition and Development Stages of Complex Attributive Adjective: Matt



Stage 1: At this stage, Matt tries to apply the structure, but he does not apply the rule appropriately or his production is contextually incorrect. His production shows that he has some awareness of the relativiser *yang* (week 13, week 21).

Stage 2: Categorised as onset. It is shown by Matt's ability to perform the correct structure on two occasions (week 45, week 53).

Stage 3: Matt has acquired the rule of the complex attributive adjective (week 68): his rule application is spontaneous, appropriate and lexically varied. It is not possible to say what will happen after acquisition, because it coincides with the end of the data collection.

5.6.2 The Acquisition of Complex Attributive Adjective: Jane

Jane's first attempt to produce the complex attributive structure by using *yang* as a relativiser in her utterance is in week 27, but she does not acquire the structure until week 45. Prior to acquisition she goes through onset (like Matt). Table 5.20 below shows the frequency of Jane's production using the complex attributive structure; the following discussion of Jane's production is based on the data in this table.

Table 5.20: The Acquisition of Complex Attributive Adjective: Jane

	Jane	
Week	**Rule Applied/ Contexts**	**Proportion**
1		
2		
4		
8		
9		
11		
12		
13		
15		
16		
17		
21		
24		
27	[0/2]	[0]
30	[2/2]	[1]
33	[1/1]	[1]
37	[1/1]	[1]
39	[1/1]	[1]
41		
45	5/5	1
51	4/4	1
53		
68	[2/2]	[1]

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

There was no occurrence of the complex attributive adjective in Jane's production prior to week 27. In week 27, on two occasions Jane tries to construct sentences by using *yang* as a relativiser, but she does not apply the rule appropriately. However, this indicates that she is aware that *yang* can introduce the modification of the preceding noun *orang* 'person' as in (121) and (122). In both cases Jane appears not to have established that an adjective should follow the relative pronoun *yang*, rather than a noun (as in (121) *laki-laki* 'man' or (122) *perempuan* 'woman'). In other words Jane miscategorises a noun as an adjective.

(121) * Dia orang yang laki-laki.
2Psg person REL man
(LIT: 'He is a person who is a man.')
(FOR: 'He is a man.')

(Jw27s230)

(122) * Dia orang yang perempuan.
2Psg person REL woman
(LIT: 'She is a person who is a woman.')
(FOR: 'She is a woman.')

(Jw27s428)

In weeks 30, 33, 37, and 39 Jane produces one or two instances of the complex attributive adjective each week. Looking at the contexts and her rule application of *yang*, it appears that she is at the onset stage on her progress towards acquisition. For example, in (123) Jane told her conversation partner that she is busy and she wants to do other things; in this case her usage of *yang* is intended to modify *barang-barang* 'things.'

(123) Saya sibuk er saya mau mengerjakan barang-barang yang lain.
1Psg busy er 1Psg want do thing-thing REL other
'I am busy er I want to do other things.'

(Jw33s109)

(124) Saya pegawai perpustakaan baru er yang baru.
1Psg employee library new er REL new
(LIT: 'I am a new library employee er who is new.')
(FOR: 'I am a new library employee.')

(Jw39s334)

Jane's production in week 39 is worth commenting on. In this case (124), it appears that Jane can contrast simple and complex attributive structures. If she used the simple attributive adjective structure *perpustakaan baru* 'new library', it would be a good and acceptable expression in the TL. However, Jane corrects herself, presumably because she wants to express her communication needs better: she uses the complex attributive adjective (124). This is regarded as confirmation of the onset of the complex attributive adjective - remembering that self-correction was one of the criteria used to determine onset.

Jane acquires the complex attributive adjective in week 45. There were five possible contexts for her to apply complex attributive adjectives, and she used the correct structure in all five instances in appropriate contexts, therefore she has fulfilled the acquisition criteria.

For example, in (125) the topic of the conversation was about the coming election, and who would be a good candidate to be Prime Minister. Jane comments that a politician, 'Mr X', may not win because he is not a tough politician. In this context the employment of the relativiser *yang* is very appropriate because it functions to contrast the character of politician 'Mr X'

with the others. In this case it demonstrates that Jane has been able to use the complex attributive structure of the TL.

(125) Dia orang yang tidak keras.
3Psg REL not tough
(LIT: 'He is a person who is not tough.')
(FOR: ' He is not a tough person.')

(Jw45s128)

In such a context (125), Jane actually could have used a simple attributive adjective such as *Dia tidak keras* 'He is not tough', but it does not convey the expression of native speakers. Jane opts to employ the relativiser *yang*, and this is exactly the form that would be used by a native speaker. This demonstrates that she has acquired the form and function of this structure. Jane employs the pronominal *dia* 'he' as subject and *orang* 'person' as the predicate, then the relative clause *yang tidak keras* 'who is not tough' functions as the modifier of *orang* (see Chapter Three).

(126) Dia orang yang baik.
3Psg person REL good
(LIT: 'She is a person who is good.')
(FOR: 'She is a good person.')

(Jw45s224)

(127) Dia orang laki-laki seperti orang laki-laki yang lain.
3Psg -person male like person male REL other
'He is a man who is like other men.'

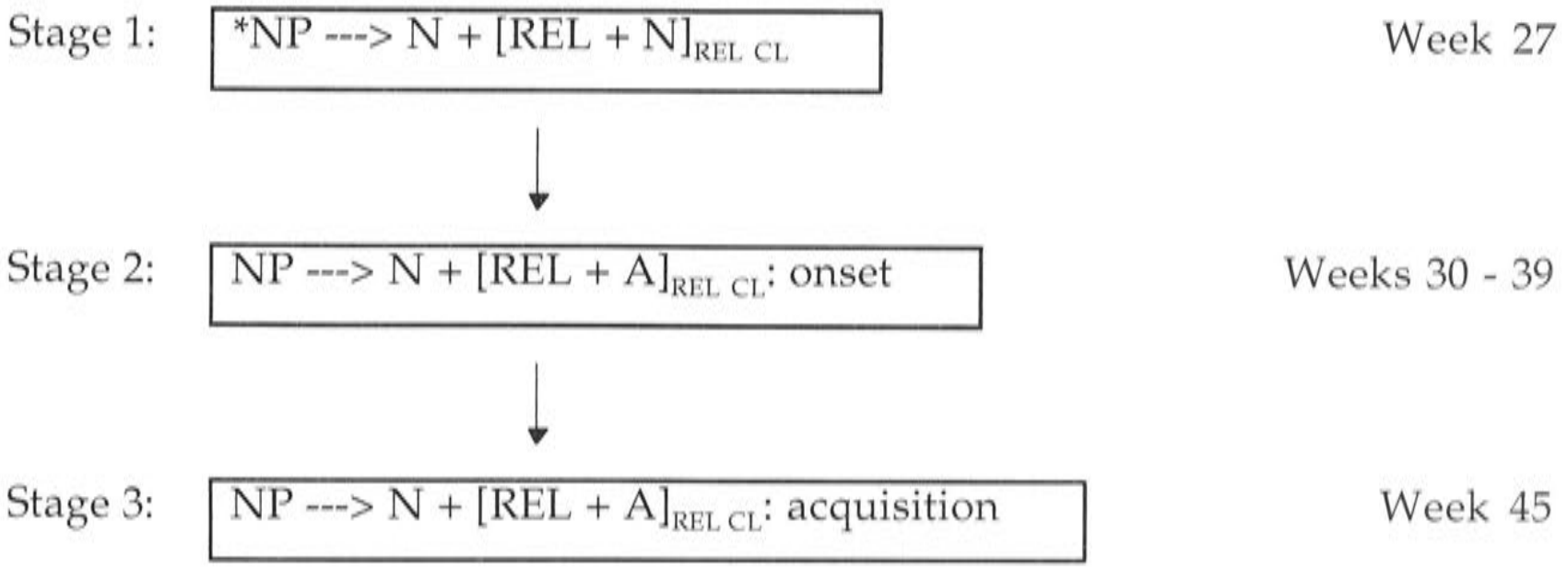
(Jw45s230)

From the other examples above (126) and (127), Jane gives further evidence that her rule application of the *yang*-clause is analysed. Jane has applied the obligatory contexts for the complex attributive adjective, and her production

resembles the structures that Indonesian native speakers would have used in such circumstances. Jane has been able not only to apply the rule in appropriate contexts, but also to produce the utterances so that they sound spontaneous as well as maintaining the cohesiveness of the topic with her conversation partner, therefore she has acquired the complex attributive adjective structure. This means that Jane is the earliest of the three students in acquiring this structure (in week 45); neither of the other two learners, Matt and Kate, acquired the structure until week 68.

In summary, Jane passes through several stages prior to acquisition of the complex attributive adjective. Diagram 5.18 shows Jane's stages to acquisition.

Diagram 5.18: The Acquisition and Development Stages of Complex Attributive Adjective: Jane



Stage 1: At this stage, Jane tries to apply the structure, but she does not apply the rule appropriately or her productions are contextually incorrect. However, this may indicate her awareness that the relative pronoun *yang* is used to introduce the modification of the preceding noun (week 27).

Stage 2: This is categorised as onset, because Jane was able to perform the structure (weeks 30, 33, 37, 39).

Stage 3: Jane has acquired the rule of the complex attributive adjective (week 45). She continues to use the structure appropriately after acquisition.

5.6.3 The Acquisition of Complex Attributive Adjective: Kate

Kate's first attempt to produce the complex attributive adjective structure is in week 27, but she does not acquire it until 41 weeks later. Before acquisition she seems to have an onset stage like Matt and Jane. Table 5.21 shows the frequency of Kate's production of the structure; the data in this table are used as the basis of the following discussion of Kate's production.

In week 27, on two occasions, Kate tries to construct sentences by using *yang* as a relativiser, but she does not apply the rule appropriately. However, this indicates that she is aware that *yang* can introduce the modification of the preceding noun *laki-laki* 'man' as in (128) and *polisi* 'police' (129). In both cases, Kate appears not to be aware that an adjective should follow the relativiser *yang*, rather than a noun. In other words Kate, like Jane, miscategorises a noun as an adjective.

(128) * Uhm dia laki-laki yang Prime Minister. ((laugh))
uhm 3Psg man REL Prime Minister
(LIT: 'He is a man who Prime Minister.')
(FOR: 'He is the Prime Minister.')

(Kw27s79)

(129) *... dan dia polisi yang wanita.
... and 3Psg police REL woman
(LIT: '... and she is a woman police.')
(FOR: '... and she is a policewoman.')

(Kw27s131)

Table 5.21: The Acquisition of Complex Attributive Adjective: Kate

	Kate	
Week	Rule Applied/ Contexts	Proportion
1		
2		
4		
8		
9		
11		
12		
13		
15		
16		
17		
21		
24		
27	[0/2]	[0]
30	[0/1]	[0]
33	[1/1]	[1]
37	[1/1]	[1]
39		
41	[1/1]	[1]
45		
51		
53	[1/1]	[1]
68	5/5	1

Key

[..] = insufficent contexts to judge acquisition

n/n = rule applications/ possible contexts

shaded cell = acquisition point

In week 30 Kate has an obligatory context to apply *yang* preceding *bertanggung jawab* 'responsible' as shown in (131), but she does not fulfil the obligatory rule (130). The relativiser *yang* is required, because in Indonesian there is normally a limit of one simple AP in an NP (see Chapter Three). In this case, in order to use two adjectives to modify the noun *mahasiswa* 'university student', it is necessary to construct a *yang*-clause containing the conjoined adjectives (131). Probably Kate is not ready to use the appropriate construction, although avoidance is also a possibility.

(130) * Saya mahasiswa bertanggungjawab dan rajin.
1Psg university student responsible and diligent
'I am a responsible and diligent university student.'

(Kw30s66)

(131) Saya mahasiswa yang bertanggungjawab dan rajin.
1Psg university student REL responsible and diligent
(LIT: 'I am a university student who is responsible and diligent.')
(FOR: 'I am a responsible and diligent university student.')

From week 33 up to week 53 can be regarded as the onset of the complex attributive adjective. Kate applies *yang* as relativiser in the correct contexts. For example, in week 33 (132) and week 37 (133) she applies the obligatory rule by positioning *yang* preceding *feminim* 'feminine' (132) and *indah* 'beautiful' (133). This indicates the onset of the structure prior to acquisition.

(132) Barangkali laki-laki ini beristri wanita yang feminim.
maybe man DET have wife woman REL feminine
(LIT: May be this man has a wife who is feminine.')
(FOR: 'Maybe this man has a feminine wife.')

(Kw33s123)

(133) Di mana sekarang tempat-tempat yang indah?
at where now place place REL beautiful
(LIT: 'Where now places that are beautiful?')
(FOR: 'Where are the beautiful places now?')

(Kw37s137)

In week 68 Kate acquires the complex attributive adjective. She is able to fulfil all five available contexts, and her rule application of *yang* is contextually appropriate, lexically varied, and spontaneously produced. In ((134), (135), (136)) we can see that the complex attributive adjectives are all produced spontaneously, and coherent with the message Kate wants to get accros. For example, in (134) Kate's question to her conversation partner, whether there is any cheap clothing in Country Road,[15] fits perfectly with the topic. Kate also produces this sentence without hesitation. Her spontaneous comment conveys to her conversation partner her belief that there is not any cheap clothing in Country Road stores. The utterance is clearly not formulaic language either, because such expressions were not drilled in the class.

(134) Apa Country Road ada pakaian yang murah?
Q Country Road there is clothes REL cheap
(LIT: Is there clothing which is cheap in Country Road?')
(FOR: Is there any cheap clothing in Country Road stores?')

(Kw68s25)

Similarly in (135) the presence of *yang* in this context is needed. Kate told her conversation partner that when her son's class went to a school camp the naughty children also went. In such a situation, her rule application of *yang* to modify the preceding noun *anak-anak* 'children' was contextually most appropriate.

---

[15] Country Road is an expensive clothing design label in Australia.

(135) ... Saya tahu uhm anak-anak yang nakal pergi juga ((laugh))
1Psg know uhm child-child REL naughty go also
(LIT: '... I know uhm children who are naughty also went.')
(FOR: '... I know uhm the naughty children also went.')

(Kw68s265)

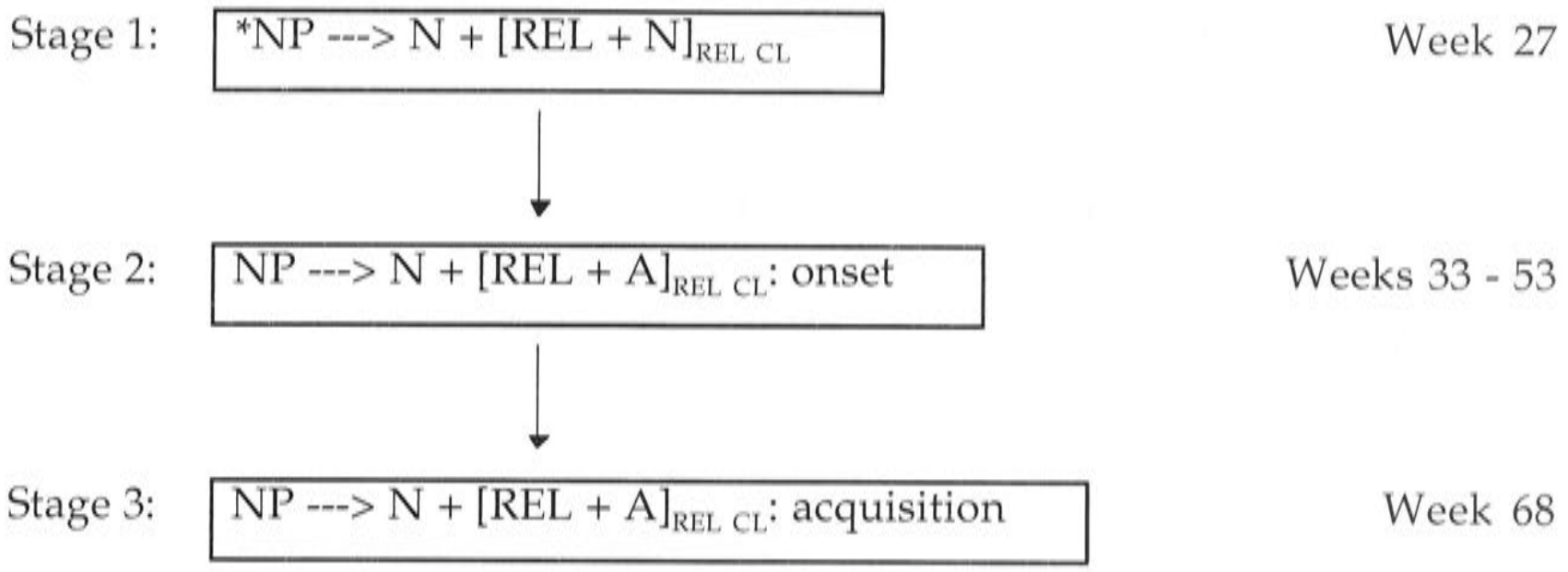
(136) Kita hanya mau pergi at the last minute. Kita
1Ppl-INCL only want go at the last minute 1Ppl-INCL
tidak bisa uhm er mendapat hotel yang baik.
not can uhm er get hotel REL good.
(LIT: 'We only want to go at the last minute. We cannot get a hotel which is good.')
(FOR: 'We wanted to go only at the last minute. We could not get a good hotel.')

(Kw68s111)

As we can see from the three examples above, all of Kate's utterances fit naturally into the context of each topic being discussed. There is no indication that Kate tries to impose the complex attributive adjective in the conversation at all. For example, in (136) Kate's family planned to go for a holiday at the last minute, and, as a result, they could not get good accommodation. Her comment using the complex attributive adjective fits well with the topic of conversation, and it shows that her acquisition of the complex attributive adjective is the product of her understanding of the usage of the TL. In other words her IL has reached the equivalent of the expected TL system with respect to this structure.

Like Matt and Jane, Kate passes through several stages prior to acquisition of the complex attributive adjective. Diagram 5.19 shows Kate's stages to acquisition.

Diagram 5.19: The Acquisition and Development Stages of Complex Attributive Adjective: Kate



Stage 1: Kate tries to apply the structure, but she does not apply the rule appropriately or in the correct context. However, it may indicate her awareness of the relative pronoun *yang*, and its use to introduce the modification of a preceding noun (week 27).

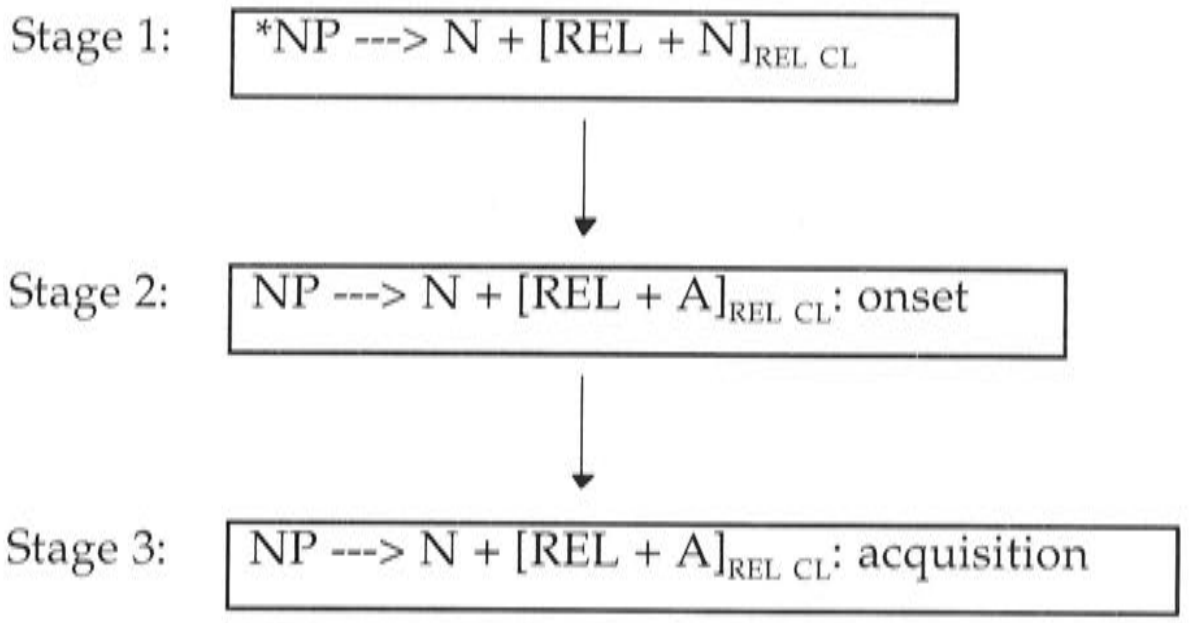
Stage 2: This is categorised as onset. Kate uses the structure one instance each in weeks 33, 37, 41 and 53.

Stage 3: Kate has acquired the rule of the complex attributive adjective (week 68). It cannot be established whether there is a post-acquisition phase, because the data collection ended in week 68.

5.6.4 The Acquisition of Complex Attributive Adjective: Summary

All the learners followed a similar pattern of development for the complex attributive adjective, though the timing of acquisition varied. Diagram 5.20 shows the general sequence of development and acquisition for all the learners.

Diagram 5.20: The Acquisition and Development Stages of Complex Attributive Adjective: Matt, Jane and Kate



Matt, Jane and Kate first applied the relative pronoun *yang* inappropriately (stage 1). Possibly, they are aware at this stage that the *yang*-clause is used to introduce the modification of the preceding noun. This was followed by an onset period, where the rule application was correct but there is insufficient evidence to fulfil acquisition criteria (stage 2). Thirdly, acquisition occurred, the productions were contextual and lexically varied (stage 3).

It is clear that the complex attributive adjective is a more complex structure to acquire than the simple attributive adjective. This is expected, because the complex attributive adjective requires the construction of a relative clause using *yang*. It is also the case that the simple attributive adjective should be a prerequisite for the acquisition of the complex attributive adjective; this in fact accords with the observed data for all the learners.

An element worth noting is that, in English, a noun phrase can consist of a noun plus a number of attributive adjectives: no matter how many atrributes a noun has, it is still treated as an NP. In Indonesian, by contrast, the structure of the phrase depends on how many attributes are attached to the noun: if there is a single attribute, it is treated as a noun phrase, but if there is more than one attribute then the relativiser *yang* is obligatory, placing the structure at the complex syntax level.

5.7 Discussion

There are no previous studies of acquisition of the syntax of adjectives in L2 Indonesian, and only one study of L1 Indonesian, with which to compare my results. Dardjowidjojo (2000) includes a description of the acquisition of adjective syntax in his study of an Indonesian child's language acquisition. In his study, Dardjowidjojo finds that the simple attributive adjective was acquired slightly before the simple predicative adjective (Dardjowidjojo 2000:214, 244-246).[16] This is the reverse of the order of acquisition in L2 which I have described in this chapter. However, I consider that Dardjowidjojo did not take sufficient account of formulaic language in his acquisition criteria, and it is therefore possible that the apparent early acquisition of the attributive adjective may have been the result of formulaic language.

A recent study of the acquisition of adjectives and negation in Scandinavian languages as L2 (Glahn et al. 2001) was specifically designed to test the validity of Pienemann's (1998) Processability Theory. Glahn et al. predicted that attributive adjective agreement (for number and gender) - such as *en gul bil* 'a yellow car' - would be acquired at stage 3 of the processability hierarchy (the Phrasal Procedure); predicative adjective agreement, like *bilen er gul* 'the car is yellow', would be acquired at stage 4 (Sentence-Procedure); and finally the placement of negatives in subordinate clauses would appear at stage 5 (Subordinate Clause Procedure). An analysis of the results obtained from each learner indicated that, in general, the predicted acquisition order was observed. The results show that the structures were acquired in an implicational hierarchy, so that the subordinate clause word order required the acquisition of predicative agreement, which in turn

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[16] Dardjowidjojo (2000) claims that his subject acquires simple attributive adjective at the age of one year and ten months (2000:214), and simple predicative adjective structure at the age of two (2000:244-246).

requires the acquisition of attributive agreement. So, the study by Glahn et al. broadly supports the validity of the processability hierarchy.

The study by Glahn et al. looks only at the acquisition of morphological agreement; it does do not examine the acquisition of adjectives from the point of view of syntax. Indonesian differs from the Scandinavian languages, in that Indonesian is an uninflected language, without agreement for number or gender, so the acquisition of adjectives in Indonesian is considered from the syntactic point of view.

The results of my study indicate that, in Indonesian, there is a clear basic acquisition pattern for simple predicative and attributive adjectives. This basic sequence can be represented as:

Predicative Adjective ⇒ Attributive Adjective

meaning that the acquisition of the predicative adjective precedes the acquisition of the attributive adjective structure. This sequence differs from the observed sequence in the study of Scandinavian languages by Glahn et al. (2001), but the different results may be explained by the Scandinavian study's focus on morphology rather than the syntax of adjectives; together with the differences between Indonesian and the Scandinavian languages.

In my study, I also examined the acquisition of complex adjective phrases. I divided complex adjective phrases into three structures:

- complex predicative adjective type 1: S ---> NP_{SUBJ} + $[A + Adv]_{AP:PRED}$
- complex predicative adjective type 2: S ---> NP_{SUBJ} + $[Adv + A]_{AP:PRED}$
- complex attributive adjective: NP ---> N + $[REL + A]_{REL\ CL}$

Unsurprisingly, these structures were acquired after the equivalent simple adjective phrases. The complex adjective phrases are also acquired in the same sequence by all the learners; that is, complex predicative adjective type 1, then complex predicative adjective type 2, and finally complex attributive

adjective. This sequence of acquisition accords with Clahsen's (1984) Speech Processing Strategy (see Chapter One). So, the complex predicative adjective type 1 would be classed as stage X+2, since the adverb is simply added to the salient position at the end of the phrase. The complex predicative adjective type 2, which requires the adverb to be positioned sentence internally would be classed as stage X+3, and the complex attributive adjective - which requires the formation of a sub-clause - would be classed as stage X+4.

Combining the acquisition sequences of predicative and attributive adjectives results in the acquisition sequence shown in Diagram 5.21:

Diagram 5.21: A Complete Sequence for the Acquisition of the Syntax of Adjectives: Matt, Jane and Kate

Simple Predicative Adjective ⇒ Simple Attributive Adjective

⇓ ⇓

Complex Predicative Adjective
(Type 1)

⇓

Complex Predicative Adjective ⇒ Complex Attributive Adjective
(Type 2)

This diagram shows that there is a sequential relationship from the simple to the complex structures, so that, for both predicative and attributive adjectives, the complex structures are acquired after the simple structures. At the same time, there is a sequential relationship from predicative adjectives to attributive adjectives, such that the simple attributive adjective will be acquired after the simple predicative adjective, and the complex attributive adjective will be acquired after both complex predicative adjective structures have been acquired. However, it is not necessarily the case that the simple attributive adjective is acquired before the complex predicative adjective - it

is noticeable that Matt acquires the complex predicative adjective at the same time as the simple attributive adjective.

Turning to the timing of acquisition, Pienemann's Teachability Hypothesis (1985) may be relevant to the discussion. Briefly, comparing the timing of the input to that of the output, it appears there is a big gap between the two. For example, the input for the complex attributive adjective is delivered 41 weeks before the structure is acquired by Jane. The gap for the other two learners is even greater.[17] The size of this gap seems to confirm Pienemann's position that teaching input has little impact on the rate of acquisition. Pienemann claims that teaching will promote, but cannot accelerate, acquisition. It would seem that the findings in this study, at least with regard to this particular structure, tend to support his view. The comparison between input and acquisition will be explored in more detail in Chapter Six.

5.8 Conclusion

In this chapter, I have presented a picture of the learners' development of adjective structures, which demonstrates that the acquisition of these structures is not a single event; rather, it is a gradual process of development in the learners' IL - a process which continues after the structures have been acquired. The development process includes the gradual assimilation first, of the simple adjective phrases, followed by the complex adjective phrases. However, it is also possible to see a process of development within each structure. Thus, learners may start out by using formulas copied from class or textbook exercises. This is followed by the onset of the structure, where the learners begin to construct phrases from their own IL resources. Then

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[17] Recall, though, that Matt and Kate probably acquired the complex attributive adjective some time in the gap between the interviews in week 53 and week 68.

the structure is acquired - and this may be followed by further development, as learners try to grasp some of the subtleties of the L2 structure.

The next chapter will compare the timing of input and acquisition in more detail, and make some suggestions for possible instruction sequences. The chapter will also summarise the findings of this study, and conclude with some suggestions for future research.

CHAPTER SIX

IMPLICATIONS FOR TEACHING AND CONCLUSION

This chapter presents the gap between formal input and acquisition, the implications for teaching, summary of findings, and implications for future research. The first section will discuss the gap between the formal input and acquisition of the syntax of negation and adjectives. Knowing the length of time between the input and the time of acquisition is an important part of understanding more about the process of learning a second or foreign language, because it indicates that some structures may be more complex than they initially appear.

6.1 The Gap between Formal Input and Acquisition

My data show that the gap between formal input and acquisition can be large. This is very noticeable for structures such as nominal predicate negation, complex predicative adjectives and complex attributive adjectives. The following sections will discuss the gap between the formal input and acquisition for each structure in turn.

6.1.1 The Gap between Formal Input and Acquisition for Negation

My data show that there is a significant gap between the teaching input and the acquisition for negation, in particular for adjectival and nominal predicate negation. Table 6.1 shows this gap by weeks.

Table 6.1: The Gap between Formal Input and Acquisition for Negation by Weeks[1]

Structure	First Teaching Input	Acquisition	Gap
***Tidak* + Verbal:**			
- Matt	week 1	week 2	1 week
- Jane	week 1	week 8	7 weeks
- Kate	week 1	week 8	7 weeks
----------	----------	----------	----------
***Tidak*+ aux + Verbal:**			
- Matt	week 2	week 30	28 weeks
- Jane	week 2	week 33	31 weeks
- Kate	week 2	week 30	28 weeks
***Tidak* + Adjectival:**			
- Matt	week 3	week 17	14 weeks
- Jane	week 3	week 15	12 weeks
- Kate	week 3	week 15	12 weeks
***Bukan* + Nominal:**			
-Matt	week 2	week 27	25 weeks
-Jane	week 2	(week 30?)[2]	(28 weeks?)
-Kate	week 2	week 37	35 weeks

[1] Unless otherwise stated in this thesis, I have used the same numbering for the teaching week and the interview week. The first week of semester 1 was not included in the study, because it was an introduction to the course. Teaching and interviews started in the same week, referred to as week 1 (see Appendix A).

[2] The brackets show that Jane did not provide strong evidence of acquisition. For the complete discussion of this point, see Chapter Four.

From Table 6.1 above, it can be seen that there is a considerable gap between the teaching input and the acquisition of verbal negation by Jane and Kate; both of them required 7 weeks to acquire the structure. Matt was a special case, as mentioned in the methodology of the study (Chapter Two). It is likely that he received some input for verbal negation in his recreational course, so it was not surprising that he took less time (one week) to acquire verbal negation.

The gap between the formal input and the acquisition of negation with auxiliary is more remarkable. The formal input occurred in week 2, but Matt and Kate took 28 weeks to acquire (week 30), and Jane took a further 3 weeks (week 33). By contrast, the gap between input and acquisition for verbal negation (without auxiliary) is only one week. The course was designed with the expectation that the difference in acquisition time between the two structures would not be great. However, the data suggest that, for these structures, the timing of first formal input does not have much influence on the timing of the learners' acquisition.

There is also a significant gap between the input and acquisition of adjectival negation. It took between 12 and 14 weeks of intensive learning for the learners to acquire adjectival negation. By the time the learners acquired adjectival negation, the first semester of teaching had in fact ended and the students were approaching the first semester examination.

The most significant gap between the input and the acquisition is in nominal negation: it took between 25 and 35 weeks for the learners to acquire nominal negation. It thus appears that the length of time between receiving the input and eventual acquisition provides an indication of the relative complexity of the structure for the learners.

In his Teachability Hypothesis, Pienemann (1984, 1987, 1988, 1998) postulates that, where students have not developed the prerequisite processing

procedures to acquire a structure, teaching of the structure will not result in acquisition: but that instruction focusing on structures from the "next stage" of development will be beneficial (Pienemann 1998:250). Although I have not based my analysis of the learners' acquisition sequence on Processability Theory, my observation that there are large gaps between input and acquisition of some structures is consistent with Pienemann's claim. This would imply that some structures have been taught before the learners are developmentally ready to acquire them. For example, learners had the first formal input for nominal negation in week 2, but it took between 24 and 36 weeks to process the syntactic nature of nominal negation in the TL. By this time, all of the students were in the second semester of their Indonesian course. The instructors would have expected students to acquire nominal negation many weeks before, in the first semester. My data clearly show that there is a difference between the teachers' expectations of the course and the learners' acquisition schedule, at least in their spontaneous oral production.

6.1.2 The Gap between Formal Input and Acquisition for Simple and Complex Predicative Adjectives

My data show that the gap between formal input and acquisition for simple predicative adjectives is small, whereas the gap between input and acquisition is large for both forms of the complex predicative adjective: type 1 and type 2. Both complex structures naturally take longer to acquire than the simple predicative adjective; however, it is noticeable that the gap from input to acquisition for type 2 is much greater (median[3] 30 weeks) than the gap for type 1 (median 18 weeks), despite the input for the former structure being delivered later (week 9 compared to week 3). The table below shows the gap between the formal input and the acquisition for all three structures.

---

[3] The median is a means of expressing an average, using the middle value of a series of data when the values are placed in numerical order (see Yeomans 1970:92).

Table 6.2: The Gap between Formal Input and Acquisition for Simple and Complex Predicative Adjective by Weeks

Structure	First Teaching Input	Acquisition	Gap
Simple Predicative Adjective:			
- Matt	week 3	week 8	5 weeks
- Jane	week 3	week 9	6 weeks
- Kate	week 3	week 9	6 weeks
Complex Predicative Adjective Type 1:			
- Matt	week 3	week 12	9 weeks
- Jane	week 3	week 21	18 weeks
- Kate	week 3	week 37	34 weeks
Complex Predicative Adjective Type 2:			
- Matt	week 9	week 37	28 weeks
- Jane	week 9	week 39	30 weeks
- Kate	week 9	week 41	32 weeks

From the table above we can see that, in terms of timing, the point of acquisition of the simple predicative adjective for all of the three learners is very close; that is, week 8 for Matt, and week 9 for Jane and Kate. This means the gap between the formal input and acquisition is between 5 and 6 weeks for all three of the learners.

In terms of the gap between formal input and acquisition for complex predicative adjective type 1, there is a significant difference between the learners: Matt required 9 weeks, Jane 18 weeks and Kate 34 weeks to process

the TL grammar. The interlearner variability in timing is greater than for the other predicative adjective structures. Kate had the largest gap for type 1, and it is interesting that the gap between the formal input and acquisition for both types of complex predicative adjectives is similar for her, with the result that both structures are acquired fairly close together, whereas for the other learners there is a large difference in acquisition times.

The gap between formal input and acquisition for the complex predicative adjective type 2 is quite large by comparison with type 1, although the variability between the learners is much less. Matt needed 28 weeks, Jane 30 weeks, and Kate 32 weeks to absorb and digest the grammar. There is a clear failure to fulfil the expectations of the course: the structure was taught in the first part of semester 1 - and presumably it was anticipated that it would be acquired in semester 1 - but the data show that this expectation is at odds with the learners' own acquisition schedules.

To summarise, it is clear that the simple predicative adjective structure was acquired first, before both complex predicative adjective structures (type 1 and type 2). Although the simple predicative adjective structure and the complex predicative adjective type 1 were taught formally in the same week, the gaps from first teaching input to acquisition were considerably different - a median gap of 6 weeks for simple predicative adjective compared to 18 weeks for the type 1 complex predicative adjective. The difference between the input-acquisition gaps for the simple predicative adjective and the complex predicative adjective type 2 was even bigger: the median gap for type 2 was 30 weeks.

This phenomenon again seems to be consistent with Pienemann's (1984, 1989, 1998) claims that acquisition order does not necessarily follow the instruction schedule. Learners cannot be constrained to acquire the desired structures from the instruction when they are not ready; in other words, they have their own route to and schedule for acquisition, and they cannot

be rushed. Pienemann does, however, suggest that instruction can be beneficial if it is delivered when learners are developmentally ready to acquire the structure (Pienemann 1998: 252). However, it may be difficult to structure the input schedule to conform with the acquisition schedule in cases where there is significant variability between the acquisition times of different learners - as with the type 1 complex predicative adjective.

6.1.3 The Gap between Formal Input and Acquisition for Simple and Complex Attributive Adjectives

My data show that the gap between formal input and acquisition is much greater for complex attributive adjectives than for simple attributive adjectives, although the input for the two structures is close together. This evidence suggests that learners have their own schedule for acquisition. The table below shows the gap between the formal input and the acquisition.

Table 6.3: The Gap between Formal Input and Acquisition for Simple and Complex Attributive Adjectives by Weeks

Structure	First Teaching Input	Acquisition	Gap
Simple Attributive Adjective:			
- Matt	week 3	week 12	9 weeks
- Jane	week 3	week 12	9 weeks
- Kate	week 3	week 24	21 weeks
Complex Attributive Adjective:			
- Matt	week 4	week 68	64 weeks
- Jane	week 4	week 45	41 weeks
- Kate	week 4	week 68	64 weeks

The three learners show the same acquisition pattern for the given structures: unsurprisingly, the simple attributive adjective is acquired first, then the complex attributive adjective. However, the timing of the acquisition is very different: the data suggest that the simple attributive adjective is more likely to be acquired early. Interestingly, Matt and Jane acquired the structure at the same time (in week 12), while Kate needed twice as long as her fellow learners (week 24). This suggests either that Kate had her own schedule for acquisition, or that the contexts of the conversation did not constrain her to produce simple attributive adjective structures.

Whereas it took 41 weeks for Jane to process the system of the complex attributive adjective, Matt and Kate both took 64 weeks, one and a half times longer. It is not surprising that all the learners took a long time to acquire the structure, because the complex attributive adjective involves subordinate clause procedures within the noun phrase. In other words, there is a clause embedded inside the noun phrase; so that what, on the surface, looks like a simple operation is actually quite complex.

However, a more important point is the difference in the time taken from the delivery of the input to the acquisition of the structure: the gap from input to acquisition for the complex attributive adjective is between 30 and 55 weeks greater than the gap from input to acquisition for the simple attributive adjective. The median gap from input to acquisition for the simple attributive adjective is 9 weeks, compared to a median gap for the complex attributive adjective of 64 weeks. This implies that the input for complex attributive adjective received in week 4 was not really effective, and that the learners were not ready to acquire the complex attributive adjective this early in the course. It is possible that delivering the input for this structure later, or at least revising and reinforcing the original input at a

later stage, would be more effective. This could be a productive theme for futher research.

To summarise, it is clear that the simple attributive adjective was acquired first, well before the complex attributive adjective, despite the fact that both of the structures were taught formally only one week apart. The course was designed with the expectation that the structures would be acquired at about the same time: in fact, this is not the case. The difference in the time taken to acquire the two structures is considerable: from 33 weeks for Jane up to 44 weeks for Kate. The data suggest that the language acquisition process, to a greater extent than many course designers assume, comes from the internal grammar of the learners, rather than the formal teaching input.

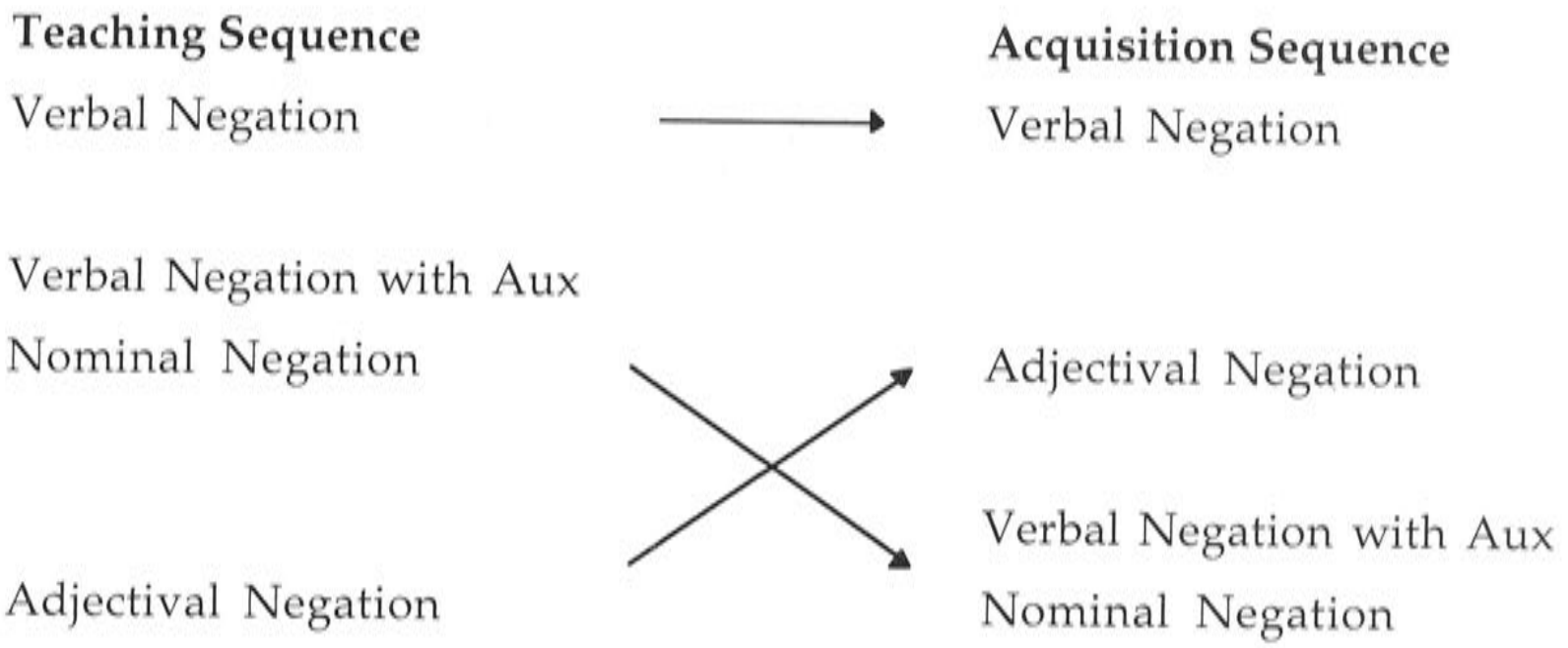
6.2 Implications for Teaching

The discussion of the findings from my data, in relation to the teaching input, has revealed that there are significant differences between the sequence of input received by the learners and their actual acquisition, both in terms of timing and order. This suggests that it would be worthwhile reviewing the timing and sequence of teaching in order to achieve a closer match between the teaching input and the observed acquisition sequence, the intention being to deliver the input closer to the time when learners are ready to acquire structures, and thus make the teaching and learning process more effective.

6.2.1 Implications for Teaching the Syntax of Negation

The sequence of teaching input is not always in line with the acquisition sequence for certain structures. The following diagram (Diagram 6.1) shows a comparison between the teaching and acquisition sequence for the negation structures considered in this study.

Diagram 6.1: The Comparison between Teaching and Acquisition Sequence for Negation



The diagram above shows that the learners first acquired verbal negation, followed by adjectival negation, and finally verbal negation with auxiliary and nominal negation.[4] This is not in line with the teaching sequence. The acquisition of nominal negation seems to be problematic for the learners; recall that in Chapter Four a large gap was seen between the acquisition of adjectival and nominal negation; in fact, the data show that the acquisition of nominal negation was not until the second semester. Yet nominal negation was needed for use much earlier in the first semester, not only for grammatical purposes but also for communication purposes. This creates a problem for instructors and textbook writers. I therefore suggest the following change to the order of teaching input. Nominal negation could still be taught in the first semester and be used for communication; however, instructors would need to be aware of the difficulties for learners, and the structure and would need to be reviewed later.

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[4] Verbal negation with aux is acquired at approximately the same time as nominal negation, and it is not clear from the data which is acquired first.

For my learners, the order of acquisition seems to be related to whether the grammar in the TL is 'more marked' or 'less marked.'[5] Nominal negation is 'more marked' than adjectival and verbal negation, and thus is acquired later. My findings are nevertheless consistent with the Multi-Dimensional Model (Clahsen 1980: Pienemann 1980; Meisel et al. 1981; Clahsen et al. 1983) and Pienemann's (1984, 1985, 1988) Teachability Hypothesis, in the sense that the learners follow a regular path of acquisition, and it is not possible for them to skip stages.

Turning to the teaching sequence, I would suggest that this be altered to make it closer to the acquisition sequence. If this were done, students would be more receptive to input from the formal classroom environment because they would be ready to learn the next step of the TL grammatical rules. The desired result would be that the learners would be more responsive to the teaching and that the instructors could also see better results from teaching.

It would also be a worthwhile direction for future research to determine whether teaching input should conform closely to the acquisition sequence, or whether it would be possible to introduce structures beyond the students' current stage of development, but which they are at the stage of readiness to acquire. This would require a specific study, similar to Pienemann's (1984, 1987) experimental study of children studying German as a second language (see Chapter One, 1.3.4), which was used to test his Teachability Hypothesis.

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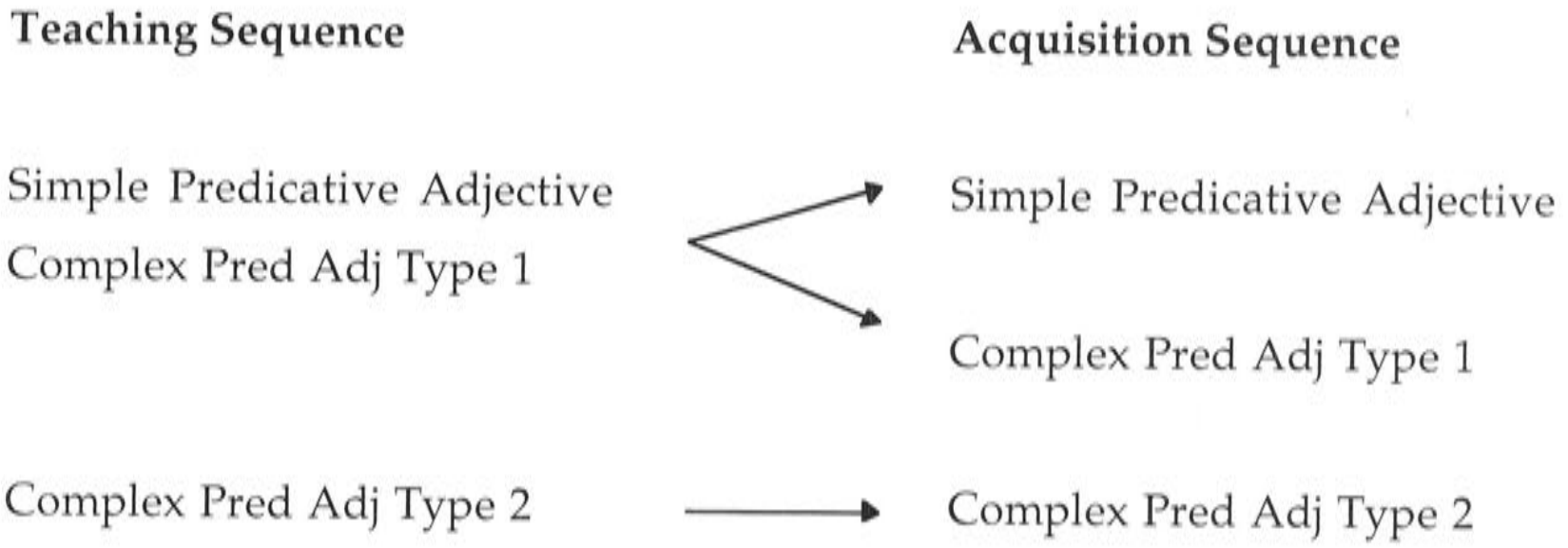
[5] I refer to *bukan* as 'more marked' than *tidak*, to signify that the use of *bukan* is more restricted than the use of *tidak* (cf Crystal 1997:234). This is not related to markedness theory (cf. Chomsky and Halle 1968; Hyman 1975; Zobl 1983; Hyltenstam 1984, 1986).

6.2.2 Implications for Teaching the Syntax of Predicative Adjectives

A comparison of the teaching sequence and the acquisition sequence for the simple predicative adjective and complex predicative adjective type 1 and type 2 is highlighted in the diagram below (Diagram 6.2).

Diagram 6.2: The Comparison between Teaching and Acquisition Sequence for Predicative Adjectives



The formal input for simple predicative adjective and complex predicative adjective type 1 was provided in the same week, but the data reveal a large difference in their acquisition times. Based on the response of my learners, I believe that it would be wiser to adjust the timing of the formal input for the two structures to provide a break between them. However, because the acquisition time for the complex predicative adjective type 1 seems to be very variable, it could be hard to adjust the timing to suit all learners.

The formal input for the complex predicative adjective type 1 was given 6 weeks before the input for type 2, but the acquisition gap between these structures was very wide (up to 25 weeks). This suggests that complex predicative adjective type 2 could be introduced much later than type 1. This timing strategy should in turn lead to improved learning outcomes.

It should be noted that the acquisition order for predicative adjectives corresponds to the teaching order: the problem is in the timing of the input. The gap between the acquisition of simple predicative adjective and the acquisition of complex predicative adjective type 1 and type 2 may be explained using Clahsen's (1981, 1984) saliency position strategy. In using the complex predicative adjective type 1 (S ---> NP + $[A + Adv]_{AP:PRED}$), the adverb is added to the end of the string, and learners do not have to split up the sentence. By contrast, the complex predicative adjective type 2 (S ---> NP + $[Adv + A]_{AP:PRED}$) requires the learners to insert the adverb inside the string. This latter operation is more complex, because learners have to identify how to split the string while still keeping the sentence meaningful. It is worthwhile for instructors to pay attention to these two different operations, because, despite the apparent simplicity of the structures, the underlying operation is quite complex.

6.2.3 Implications for Teaching the Syntax of Attributive Adjectives

A comparison of the teaching sequence and the acquisition sequence for the simple attributive adjective and complex attributive adjective suggests that they are in line. However, I contend that the time gap between the teaching of these two structures could be widened in accordance with the acquisition sequence of the learners.

Diagram 6.3: The Comparison between Teaching and Acquisition Sequence for Attributive Adjectives

Teaching Sequence		Acquisition Order
Simple Attr Adj	⟶	Simple Attr Adj
Complex Attr Adj	⟶	Complex Attr Adj

The diagram (Diagram 6.3) above shows that the teaching sequence or the formal classroom input is parallel to the order of acquisition. However, the gap between the teaching input and acquisition is very large. This leads us to examine the textbook presentation. In the textbook used by the learners, the simple attributive adjective and complex attributive adjective are introduced one week apart (week 3 and week 4 respectively - see Appendix A). This proximity may cause frustration for the instructors and the learners, because the learners' difficulties with the structure suggest that they could not assimilate the formal input from the classroom. Presumably, according to my findings, the learners are not ready to progress to the next stage of the structure. In Chapter Three, I stated that the complex predicative adjective looks simple, but actually is a very complex structure because there is a relative clause nested under the noun phrase.

In summary, I am not suggesting that current textbooks, teaching materials and teaching aids should be discarded. Rather, it may be possible to re-arrange the order and timing of the presentation for negation and adjectival syntax where these are not synchronous with the learners' internal syllabus. As has been previously discussed, there is a large gap between the formal input and the acquisition; therefore, it is preferable that the teaching order and strategies are designed from the point of view of learners.

6.3 Summary of Findings

This study has presented the similarities and differences in three learners' performance on their route to acquisition of the syntax of negation and adjectives. In the discussion of acquisition, I have also discussed where relevant the learners' post-acquisition development paths.

In Chapter Four, I presented the acquisition order for verbal, adjectival, and nominal negation for the three learners. My data show that there is a definite acquisition order: the learners acquire verbal negation before adjectival negation, and nominal negation is acquired last. This order appears to be fixed. Two case studies have been conducted on Indonesian language acquisition: Adnan (1994) and Dardjowidjojo (2000). Adnan claims that his L2 subject does not acquire nominal negation, and Dardjowidjojo states that his L1 subject acquires nominal negation before verbal negation. These findings are not borne out by my study.

In Chapter Five, on the acquisition of the predicative adjective and attributive adjective, my data show that the predicative adjective is acquired before the attributive adjective. This is in contrast to the findings of Glahn et al. (2001); who found that the attributive adjective is acquired before the predicative adjective in the Scandinavian languages. The main aim of the study by Glahn et al. was to test the validity of Pienemann's (1998) Processability Theory. Their study does not investigate the acquisition of syntax, but focuses on morphological aspects of adjective agreement, whereas my analysis of Indonesian necessarily focuses on syntax. This, in addition to the difference between the languages, makes a direct comparison of the results impossible.

6.4 Implications for Future Research

The findings of this study have a number of implications for future research. There were several aspects of the use of *bukan* 'not' which I did not examine, because these uses did not emerge in the learners' interlanguage. In order to gain a complete picture of the development of *bukan*, it would be necessary to conduct a detailed study of the acquisition of the several uses of *bukan*: not only nominal negation as I have described in this study, but also *bukan* as a contrastive negator, and *bukan* as a sentence tag. Such a study

would require gathering data from (more advanced) students at different stages of development, possibly over several years, because the development may take place over an extended period.

My research is one of a small number of existing studies in Indonesian SLA. It is to be hoped that in the future there will be further research on the acquisition of Indonesian syntax and morphology in natural settings for adults and children as L2 and also for children as L1. There are many aspects of Indonesian SLA which remain to be studied: some of the data collected for this study relate to other structures in Indonesian, and could provide the basis for a number of studies, including verbal morphology, different types of noun phrase, interrogative, imperative and passive structures. My thesis offers findings on the aquisition and development of the syntax of negation and the syntax of adjectives by Indonesian second language learners, which should be of value to applied linguists, course book writers, curriculum designers, and teachers of Indonesian.

Appendix A

Excerpts from the First Year of the Indonesian Course Outline

1. COURSE CONTENT

The course assumes no prior knowledge of the language.

The course content comprises the following components:

Sound system

Key structures and word forms of the language

Conversation and oral-aural skills

Reading comprehension

Drill on basic speech patterns

The textbook is: *Bahasa Indonesia Langkah Baru: A New Approach Book I*: Yohanni Johns, 1989 (first published 1977).

II. AIMS OF THE COURSE

In the first and second semester course, we aim to teach basic grammatical constructions and sentence patterns of standard Indonesian. Mastery of controlled and graded skills will enable students to manipulate the structures they have learnt, so that they will be able to express themselves freely and understand what is said to them on a number of topics already studied.

III. CLASS CONTACT HOURS

The course requires five contact hours a week divided into one 1-hour and two 2-hour sessions.

The 1-hour session is devoted to grammar and various types of exercises. The 2-hour sessions consist of listening to tapes, oral-aural exercises, practising conversation, more key structures and word forms, and the generation of new sentences as further examples of the new grammar presented. The course follows the chapter sequence of the textbook. The students have a 1-hour grammar lecture, and 4 hours of tutorial practice.

Appendix A (cont.)

IV. TEACHING SCHEDULE (First semester)

Week 0 (Introduction to the course)[1]

Lesson: Chapter 1

Pronunciation and alphabets

Greetings:

Selamat pagi.

good morning

'Good morning.'

Activity: Listening to tape

Week 1 (Interview Week 1 - interviews and data collection start)

Lesson: Chapter 2 - questions; commands; negation (Structure: *tidak* + VP_{PRED})

Ayah *tidak* makan.

father not eat

'Father does not eat.'

Activity: Practising short dialogues about daily routines

Week 2 (Interview Week 2)

Lesson: Chapter 3 - asking permission; negation (Structure: *tidak* + aux + VP_{PRED})

Murid-murid *tidak* bisa bernyanyi.

pupil pupil not can sing

'The pupils cannot sing.'

Activity: Asking questions - what one can do and can't do

Lesson: Chapter 4 - indicating possession; negation (Structure: *bukan* + NP_{PRED})

Itu bukan buku.

DET not book

'That is not a book.'

Activity: Dramatise 4.7 - practising greeting dialogues

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[1] Text in brackets indicates my comments, relating the course outline to the discussion in the body of the thesis.

Appendix A (cont.)

Week 3

Lesson: Chapter 5 - adjectives; parts of the body

Structures: i) (*tidak* + AP_{PRED})

Kamar itu tidak bersih.

room DET not clean

'The room is not clean.'

ii) (Simple predicative Adjective)

Udin sakit.

Udin sick

'Udin is sick.'

iii) (Complex Predicative Adjective Type 1)

Dokter itu baik sekali.

doctor DET good very

'The (medical) doctor is very kind.'

iv) (Simple Attributive Adjective)

Kopi panas ini kopi Ayah.

coffee hot DET coffee father

'This hot coffee is father's.'

Activity: Dialogue - visiting the doctor or chemist

Week 4 (Interview Week 4)

Lesson: Chapter 6 - describing people (Structure: Complex Attributive Adjective)

Dia anak yang baik.

3Psg child REL good

'He is a good child.'

Activity: Reading comprehension

Appendix A (cont.)

Week 5

Lesson: Chapter 7 - reading passages followed by reading comprehension questions

Revision Chapters 2 - 6

Activity: Translation and create comprehension questions

Week 6

Lesson: Chapter 8 - parts of the body; reduplication (reduplication of adjective indicating intensity or a plural noun)

Gambar-mu bagus-bagus.

picture 2Psg good good

'Your pictures are good.'

Mid-semester Test

Introducing *me*-N verbs, and imperative construction

Activity: Listening to the tape and conversation practice

Week 7

Mid-semester break

Week 8 (Interview Week 8)

Mid-semester break

Week 9 (Interview Week 9)

Lesson: Chapter 9 - object focus; adjectives (Structure: Complex Predicative Adjective Type 2)

Hawa terlalu/sedikit dingin.

weather too/a little cold

'The weather is too/a little cold.'

Cuaca cukup panas sekarang.

climate enough hot now

'The climate is hot enough now.'

Activity: Reading comprehension and conversation practice

Appendix A (cont.)

Week 10

Lesson: Chapter 10 - telling time and dates

Introducing suffix *-kan*

Activity: Listening to the tape and creating mini dialogues

Week 11 (Interview Week 11)

Lesson: Chapter 10 continued

Object focus used for imperative, request or prohibition

Activity: Listening to the tape and creating mini dialogues

Week 12 (Interview Week 12)

Revision : the use of *yang* in general and in object focus

Revision Chapters 8 - 10

Activity: Grammar exercise

Week 13 (Interview Week 13)

Revision: suffix *-kan*

Revision Chapters 2 - 7

Activity: Grammar exercise

Week 14

Individual consultation on any topic

Week 15 (Interview Week 15)

Written examination: Chapters 2 - 10

Appendix B

Police Officer (Topic used in week 37)

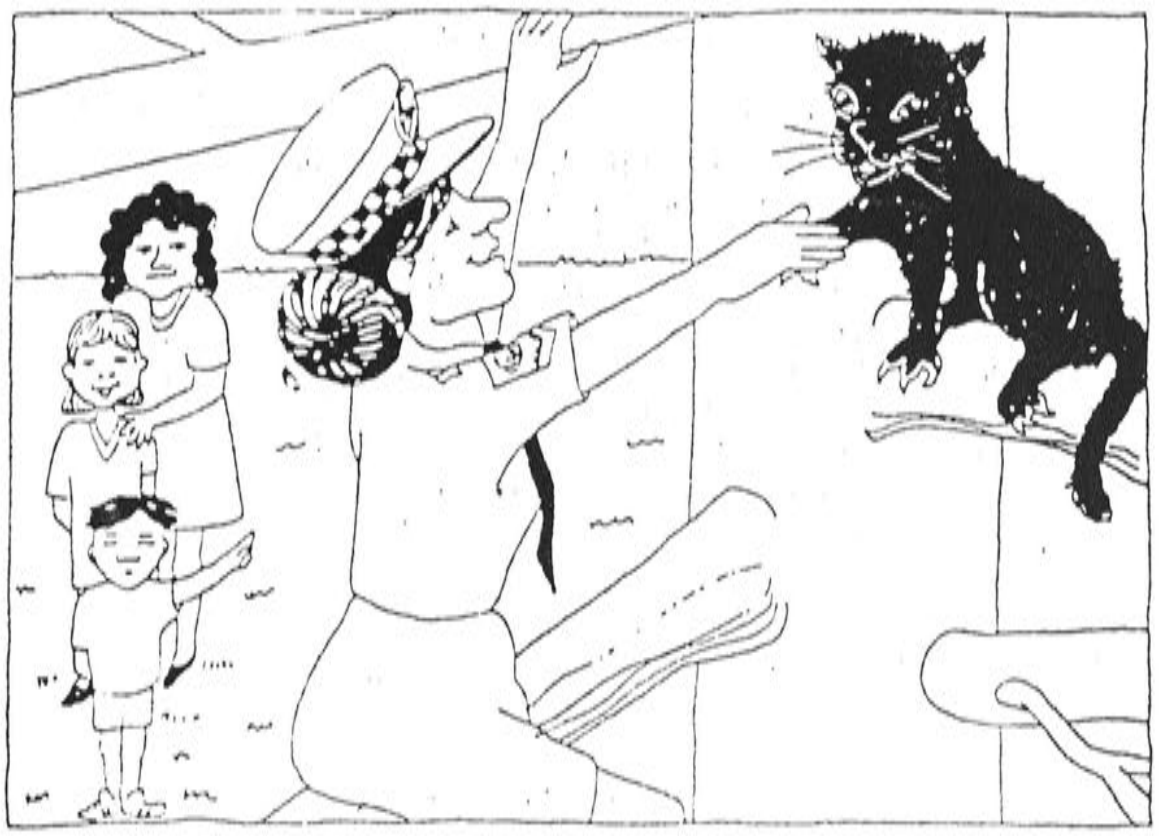
Picture Recognition - Police Officer

Picture Recognition - Police Officer

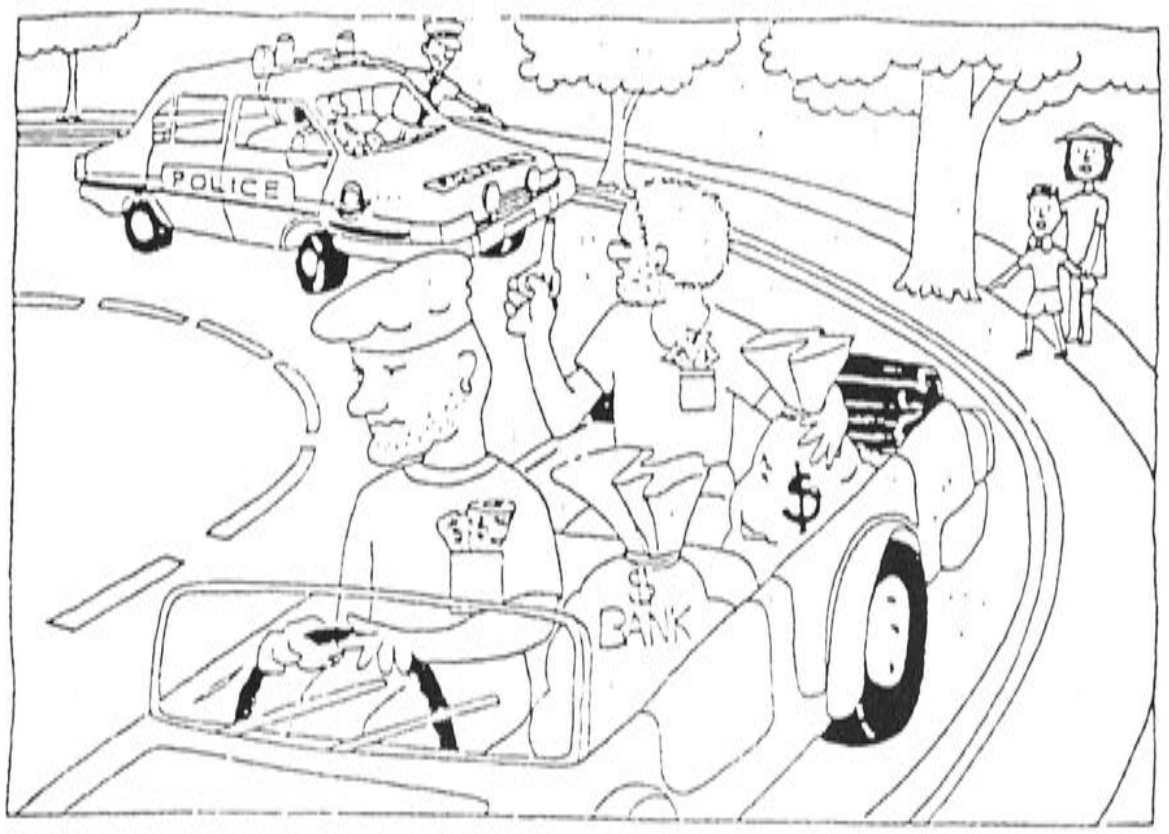
Appendix B (cont.)

Police Officer (Topic used in week 37)

Picture Recognition - Police Officer



Picture Recognition - Police Officer



Appendix C

The Interview Schedule

Week	Interview Topic	Interview Length
Week 1	Introduction	5 mins
Week 2	My Family	10 mins
Week 4	Daily Talk	10 mins
Week 8	Week End	20 mins
Week 9	Travel	20 mins
Week 11	Likes and Dislikes	20 mins
Week 12	My Hobbies	25 mins
Week 13	My Job	20 mins
Week 15	The Exam	25 mins
Week 16	Holiday Plans	20 mins
Week 17	At the Market	40 mins
Week 21	My Ambition	45 mins
Week 24	Pay or Free Education	45 mins
Week 27	My Habits	45 mins
Week 30	Essay Extension Request	40 mins
Week 33	Should Women Have Higher Status than Men	40 mins
Week 37	Police Officer	45 mins
Week 39	Recipe Sequence	45 mins
Week 41	Picnic Sequence	45 mins
Week 45	Why Do I Study Indonesian	40 mins
Week 51	My Family Activities	45 mins
Week 53	Problems in Learning Indonesian	45 mins
Week 68	Work and Holidays	45 mins

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